



**FIRST THINGS FIRST**

*Ready for School. Set for Life.*

**Agenda Item:** Discussion and Possible Approval of the 2014 Pinal Needs and Assets Report

**Background:** The governance model of FTF includes a State level Board and Regional Partnership Councils. The model combines consistent state infrastructure and oversight with strong local community involvement in the planning and delivery of services.

FTF has responsibility for planning and implementing actions which will result in an improved system of early childhood development and health statewide.

The Regional Partnership Councils represent a voluntary governance body responsible for planning and implementing actions to improve early childhood development and health outcomes within a defined geographic area of the state (the region).

**The Regional Partnership Councils have a variety of responsibilities under the law. Responsibilities defined in ARS Title 8, Chapter 13, Section 1161 are:**

- A. Identify the assets available for early childhood development and health programs in its region, including opportunities for coordination and use of other available funding sources.
- B. Identify and prioritize the unmet need for early childhood development and health programs in its region.
- C. Submit a report detailing assets, coordination opportunities and unmet needs to the Board biannually. (The AzECDH Board shall have the discretion to approve or reject a Council's Assessment in whole or in part or to require revisions.)

**Recommendation:** Staff's recommendation is to approve the submitted final draft report from the Regional vendor.

**First Things First  
Pinal Regional  
Needs and Assets Report  
July 2014**



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Michael Kinter  
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## Letter from the Chair

July 18, 2014

The past two years have been rewarding for the First Things First Pinal Regional Partnership Council, as we have delivered on our mission to build better futures for young children and their families. During the past year, we have touched many lives of young children and their families by increasing access to quality childcare, healthcare, early literacy, and family support services.

The First Things First Pinal Regional Partnership Council will build on our past successes and continue to expand the early childhood system to better serve families. For the next year, we will work to expand the availability of our current programs and will also work to implement new strategies that address the unmet needs of families in our region.

Our strategic direction has been guided by the Needs and Assets reports, specifically created for the Pinal Region in 2012 and the new 2014 report. The Needs and Assets reports are vital to our continued work in building a true integrated early childhood system for our young children and our overall future. The Pinal Regional Council would like to thank our Needs and Assets Vendor LeCroy & Milligan Associates, Inc. for their knowledge, expertise and analysis of the Pinal region. The new report will help guide our decisions as we move forward for young children and their families in the Pinal Region.

Going forward, the First Things First Pinal Regional Partnership Council is committed to meeting the needs of young children by providing essential services and advocating for social change.

Thanks to our dedicated staff, volunteers and community partners, First Things First is making a real difference in the lives of our youngest citizens throughout the state of Arizona.

Thank you for your continued support!

Sincerely,

Stuart Fain, Chair  
Pinal Regional Partnership Council

**Pinal Regional Partnership Council**

## Regional Partnership Council Members

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Stuart Fain, Chair,  
Richard Saran, Vice Chair  
Adam Saks  
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# Introduction and Acknowledgements

A child's most important developmental years are those leading up to kindergarten. First Things First is committed to helping Arizona children age five and younger receive the quality education, healthcare and family support they need to arrive at school healthy and are ready to succeed. Children's success is fundamental to the wellbeing of our communities, society and the State of Arizona.

This Needs and Assets Report for the Pinal Geographic Region provides a comprehensive picture of the early childhood resources available for the region's young children and their families, identifies gaps in these resources, and points to ways in which children and families can be best supported. Families and young children in the Pinal Region need a supportive system that helps set children on the trajectory of a healthy and successful life: exposure to rich learning environments from a very young age; access to high quality, non-parental care from birth to pre-K; access to health care; health insurance; and access to coordinated family services such as home visitation, parent education, and family literacy.

The Pinal Regional Partnership Council recognizes the importance of investing in young children and empowering parents, grandparents, and caregivers to advocate for services and programs within the region. Since the 2012 Needs & Assets Report, the Pinal Region has focused on education and service delivery systems that improve access to high quality early care and education programs, increase the knowledge and skill sets of family home care providers, expand the availability of preventative screening and referral services, increase public awareness of the importance of early childhood development and health, and foster greater collaboration between service providers. This report provides useful data for guiding the Regional Partnership Council's decision-making and information about the region's contribution to building a comprehensive statewide early childhood development system.

## Acknowledgments

The First Things First Pinal Regional Partnership Council owes special gratitude to the agencies and key stakeholders who participated in numerous work sessions and community forums throughout the past two years. The Pinal Region's successes are due, in large measure, to the contributions of numerous individuals who gave their time, support, and expertise.

To the current and past members of the Pinal Regional Partnership Council, your dedication, commitment and extreme passion has guided the work that has made a difference in the lives of young children and families within the region. Our continued work will help move forward building a true comprehensive early childhood system for the betterment of young children within the region and the entire state.

We also want to thank the Arizona Department of Economic Security, Arizona Department of Health Services, Arizona Department of Education, and Arizona State Immunization Information System, for their contribution of data for this report.

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## Executive Summary

This report details findings from the Needs and Assets assessment completed in 2014 for the Pinal Regional Partnership Council. This assessment will be used to help guide the Council's strategic planning and funding decisions for the next two years. The report includes relevant comparisons with data from previous years to provide a context of trends within the region.

## Methodology

First Things First obtained most of the data included in this report from others state agencies, among them the Department of Economic Security, Department of Health Service, and Department of Education. Most demographic and economic data came from various divisions of the U.S. Census Bureau: the Biennial Census, American Community Survey, and Small Area Income and Poverty Estimate Program. The American Community Survey produces 1-year, 3-year, and 5-year estimates. Each of the estimates has certain distinguishing features.

- One-year estimates are based on 12 months of data collected in areas with a population of 65,000 or greater. These estimates are the most current, but are considered less reliable than the 3-year or 5-year estimates.
- Three-year estimates use data collected over 36 months in areas that have a population of 20,000 or greater. They are less current than 1-year estimates but more current than 5-year estimates. Their reliability level is higher than the 1-year estimates but lower than the 5-year estimates.
- Five-year estimates rely on 60 months of data collected in all areas. With the largest sample size they are considered the most reliable, although they are the least current.

For this report, one or more different U.S. Census data sources may be used in a single exhibit, depending on the type and availability of the date being reported on. In some cases, only one type of American Community Survey estimate was available for an indicator. Data from different U.S. Census Bureau sources for the same year for the same indicator may slightly differ.

Several general principles guided the choice of data presented and the way the data were shown.

1. Whenever possible and useful, provide data for multiple geographical levels - local level (i.e., zip code or town), county, state, and nation – to better enable comparison.
2. Whenever possible and useful, provide data for multiple time points to enable identification of trends.
3. Percentages are rounded off to the nearest whole percent, except in cases where an additional decimal place will be useful for comparisons.

## Key Demographic Findings

- Children under five years of age make up approximately 8% of the region's population.
- The population of Pinal County is projected to increase by 39% to 561,844 over the next 10 years.
- Whites constituted the Pinal County's largest racial/ethnic group in 2012, making up 58% of the population, followed by Hispanics at 29%. Within the Ak-Chin Indian community, 84% of people self-identified as American Indian, followed by 9% that reported they were Hispanic.
- About 51% of grandparents in the region that share living space with their children and grandchildren have assumed primary caregiving responsibility for their grandchildren. Nineteen percent of such grandparents have been acting in that role for five or more years.
- In each year from 2010 to 2012, 10% of the births in Pinal County has been to teenagers.
- Twenty-three percent of Pinal residents five years of age and older report that a language other than English is spoken in their homes, although that language may not be spoken exclusively.

## Key Economic Findings

- The median family gross annual income in Pinal County rose from \$49,012 in 2011 to \$55,969 in 2012. The median income of single parent male-headed families and female-headed families was 72% and 39%, respectively, of the median income of married couple families in 2012.
- Eighteen percent of Pinal County residents lived in poverty in 2012.
- On average, 43% of single-parent female-headed households with children under five years of age lived in poverty in Pinal County from 2008 to 2012.
- In each year between 2010 and 2013, in a majority of the region's school districts, the percentage of students who were economically disadvantaged surpassed 50%.
- The unemployment rate in the region steadily dropped from 12.2% in 2009 to 8.4% in 2013.
- Total employment in Pinal County has shown a relatively steady increase between the fourth quarter of 2011 and the first quarter of 2013.
- The number of families with children ages 0-5 enrolled in Temporary Aid to Needy Families (TANF) steadily decreased from January 2009 to January 2012.
- Enrollment in the Supplemental Nutrition Assistance Program by Pinal County families with children ages five years or younger steadily increased from 5,457 in January 2009 to 7,387 in January 2012, a 35% increase in enrollment over the period.
- In 2011, in 12 of 13 Pinal districts for which data were available, more than half of students were enrolled in the free or reduced lunch program.
- Only approximately 21% of the children certified for the Women Infant and Children (WIC) Program go on to participate in it.

## Key Education Findings

- The percentage of mothers with a high school diploma was 35% in the 2012, the highest of the last five reported years.
- A higher percentage of adults in Pinal County have graduated high school, completed some college, have some college experience, and have attained an associate's degree compared to the state and nationwide. However, the county lags behind state and national figures for attainment of higher education such as a bachelor's, graduate, or professional degree.
- In 2013, 63% of Pinal County 3<sup>rd</sup> grade students passed the AIMS Mathematics test, a 5% decrease from 2012. Seventy-one percent of 3<sup>rd</sup> grade students passed the AIMS Reading test, 2% lower than in 2012.
- In 2013, a total of 3,660 preschool and elementary students in Pinal Region's public school districts were enrolled in special education and, of those students, 1,175 (32%) were ELL. Districts with the largest number of Special Education students in 2013 were Casa Grande Elementary District (752), and Florence Unified District (608), and Maricopa Unified District (500). Casa Grande Elementary District had the largest number of ELL students (368), followed by Florence Unified and Maricopa Unified with 153 and 136 ELL students, respectively.
- In 2012, graduation rates in Pinal County school districts ranged from 30% for Mary C O'Brien Accommodation District to 97% for Superior Unified School District, with six of the nine districts having a rate between 72% and 79%.

## Key Early Child Care Findings

- A total of 43 child care centers and child care homes in the region participated in Quality First in 2014.
- In 2013, a total of 93 child care providers in Pinal County were licensed by the Arizona Department of Health Services.
- Capacity in Pinal child care facilities licensed by the Arizona Department of Health Services increased by 10% between 2011 and 2013.
- The number of Pinal families that were eligible for child care assistance decreased from 660 in January 2011 to 592 in July 2012, a 10% drop. However, the number of families receiving such assistance fluctuated in a narrow range (549-557) over the same period.
- The number of Pinal children eligible for child care assistance decreased by 10% between January 2011 and July 2012, from 1,014 to 914. The number of children receiving such assistance fluctuated between 831 and 863 over the same period.
- The number of Pinal families and children on the child care assistance wait list increased by 56% and 50%, respectively, between July 2011 and July 2012.
- Eight people participated in Department of Economic Security-sponsored Child Care Professional Training held in Pinal Region in June and July 2013. Two trainings have been scheduled in the region in 2014, one in Apache Junction beginning in March 2014 and a second in Casa Grande starting in May 2014.

- In 2014, 83 early education teachers in the region received T.E.A.C.H. scholarships and 66 early care and education teachers received Professional REWARD\$ professional development incentive. The Pinal Regional Partnership Council also provided funding for higher education and credentialing to 64 early care and education teachers.
- The Pinal Regional Partnership Council provided Quality First scholarships to 416 families in SFY 2014.

## **Key Family Support Findings**

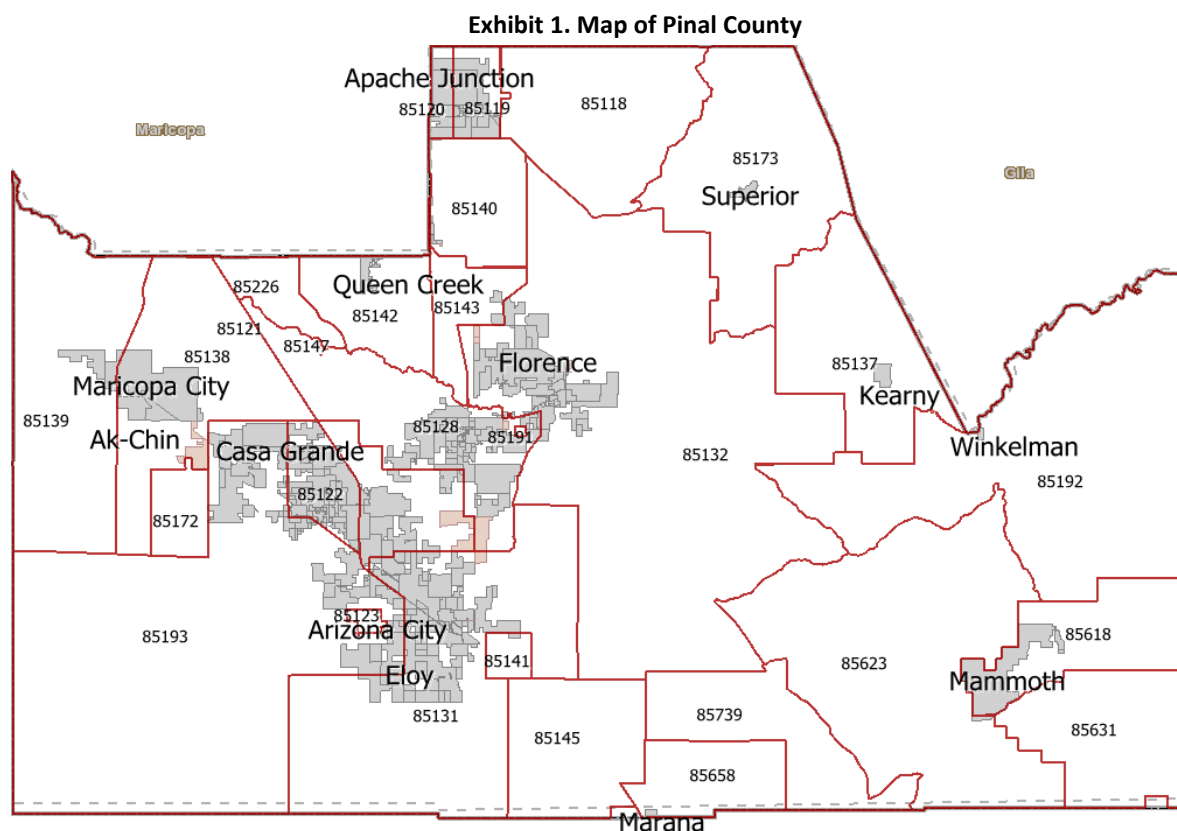
- In SFY 2014, 330 parents participated in community-based parent education trainings.
- The Pinal Regional Partnership Council funded the distribution of 2,000 food boxes to needy families with young children in SFY 2014.
- Home visitation programs funded by the Pinal Regional Partnership Council provided home visitation services to 416 families in SFY 2014.

## **Key Health Findings**

- Enrollment in Kids Care/Kids Care II increased from 432 in February 2012 to 1,308 in February 2013. However, the program ended on January 31, 2014. Some children formerly served by KidsCare may enroll in health insurance through the Affordable Care Act (ACA) but children whose parents receive health insurance through their workplace cannot get coverage through the ACA. Some parents may not be able to afford to add their children to their workplace health insurance.
- From 2008-2011, 81-85% of pregnant women in Pinal County had at least nine prenatal visits.
- The percentage of low birth weight babies born in Pinal County between 2008 and 2012 has generally been lower than the statewide rate. However, the rate has risen over the last two reported years from 6.6% in 2010 to 7.2% in 2012.
- From 2010 to 2012, the completion rate for the 3:2:2:2 vaccination series was 73%-74% and in each year surpassed the statewide rate. Over the same period, percentage of Pinal children ages 19 to 35 months that completed the 4:1:3:3:1 vaccination series ranged from 49% to 51%, similar to the statewide rates. These rates nearly mirrored the state rates for those years.
- The percentage of the region's children ages 0-2.9 years old that were referred for developmental screening and went on to be screened has shown a steady decrease from a high of 69% in 2007 to 40% in 2012. The Pinal rates for screening children ages 0-2.9 lagged behind the state rates for 2009-2012. For children ages 3-5.9, the screening rate fluctuated, but in 2012 was less than half (47%) of those referred were screened.
- In 2012 in Pinal Region, 135 children ages 0-2.9 years and 161 children ages 3-5.9 received developmental disability services. Children ages 0-2.9 received 9,277 service visits and children ages 3-5.9 received 20,005 service visits.
- In 2012, ninety-two Pinal newborns were admitted into intensive care units. Of the admitted babies, 106 (55%) were pre-term and 108 (47%) had a low birth weight.

# Demographic Overview

The Pinal Regional Partnership lies within the boundaries of Pinal County, Arizona, excluding lands of the Gila River Indian Community, Tohono O’odham Tribe and San Carlos Apache Reservation. Pinal County has a population density of 71 people per square mile, but the density varies greatly by geographic area (see map in Appendix D). Seventy-eight percent of the population resides in urban areas, while 22% resides in rural localities (City-Data.com, n.d.). Between 2008 and 2012, the county’s population increased by 18%. The county’s largest population growth occurred in the cities of Eloy (35%), Florence (27%), and Casa Grande (19%) (United States Census Bureau, n.d.). The county’s overall population is projected to increase by 39% over the next 10 years (Arizona Department of Administration, n.d.).



## Who are the Families and Children Living in the Pinal Region?

Prior to examining the well-being of children and families in Pinal County, it is important to consider the demographic makeup of these populations. Demographic data offer descriptive information about a region that can help to inform an analysis of needs, assets, and trends. Important demographics to examine include: number of families and children living in the region; change in population over the last ten years, and since the 2012 Needs and Assets report publication; and notable trends in specific communities. This information is provided in the following sections. Whenever possible, data are presented for children aged zero to five, the target population for the First Things First initiatives.



## Population

The population estimates for Pinal County included in Exhibit 2 show the county has continuously grown from 2007 to 2012. In 2012, the total population estimate was 387,365 people, a 28% increase from 302,633 in 2007. This increase surpasses the approximately 3% population growth in the whole state over the same period.

**Exhibit 2. Population, All Ages, 2007-2012**

Locality	2007	2008	2009	2010	2011	2012
<b>Pinal County</b>	302,633	329,060	340,962	385,770	383,553	387,365
<b>Arizona</b>	6,338,755	6,500,180	6,595,778	6,410,810	6,467,315	6,553,255
<b>United States</b>	301,621,159	304,059,728	307,006,556	309,326,225	311,587,816	313,914,040

Note. From *Annual Estimates of the Resident Population*: April 1, 2000 to July 1, 2009; April 1, 2010 to July 1, 2012; Demographic and Housing Estimates 2008-2012 American Community Survey 5-Year Estimates, United States Census Bureau.

Exhibit 3 shows the number of children ages zero through five, the total population, and the percentage of children in this age group out of the total population for Pinal localities and the county as a whole. The data in the table are sorted in descending order by the percentage of children under five out of the total population. The percentage of children under five varies across the region from 2% in Oracle to 12% in City of Maricopa. The bar chart presented in Exhibit 4 illustrates the number of children by community in descending order, showing that greatest number of young children live in the City of Maricopa, Casa Grande, Queen Creek, and Apache Junction, respectively. Out of the total population, roughly 8% is comprised of children under five years-old. The data in Exhibits 3 and 4 offer guidance about communities where early childhood services may be most needed.

**Exhibit 3. Pinal Region Under Age Five Population by Locality, 2008-2012 5-Year Estimates**

Locality	Total Population	Under 5 Population	Under 5 as a Percentage of Total Population
<b>Ak-Chin Village</b>	1,032	100	10%
<b>Apache Junction</b>	35,663	1,687	5%
<b>Casa Grande</b>	57,281	4,720	8%
<b>Coolidge</b>	16,922	1,266	8%
<b>Eloy</b>	28,301	1,991	7%
<b>Florence</b>	36,283	1,003	3%
<b>Hayden</b>	798	50	6%
<b>Kearny</b>	2,209	89	4%
<b>Mammoth</b>	1,246	82	7%
<b>Maricopa, City of</b>	41,626	5,013	12%
<b>Oracle</b>	3,829	70	2%
<b>Queen Creek</b>	25,849	2,594	10%

Locality	Total Population	Under 5 Population	Under 5 as a Percentage of Total Population
San Manuel	19,707	776	4%
Superior	2,869	115	4%
Winkelman	396	21	5%
<b>Pinal County Total</b>	<b>368,374</b>	<b>28,572</b>	<b>8%</b>

Note. From Demographic and Housing Estimates: 2008-2012 American Community Survey 5-Year Estimates, United States Census Bureau.

**Exhibit 4. Bar Chart of Number of Children in Pinal Region Under Age Five By Locality**

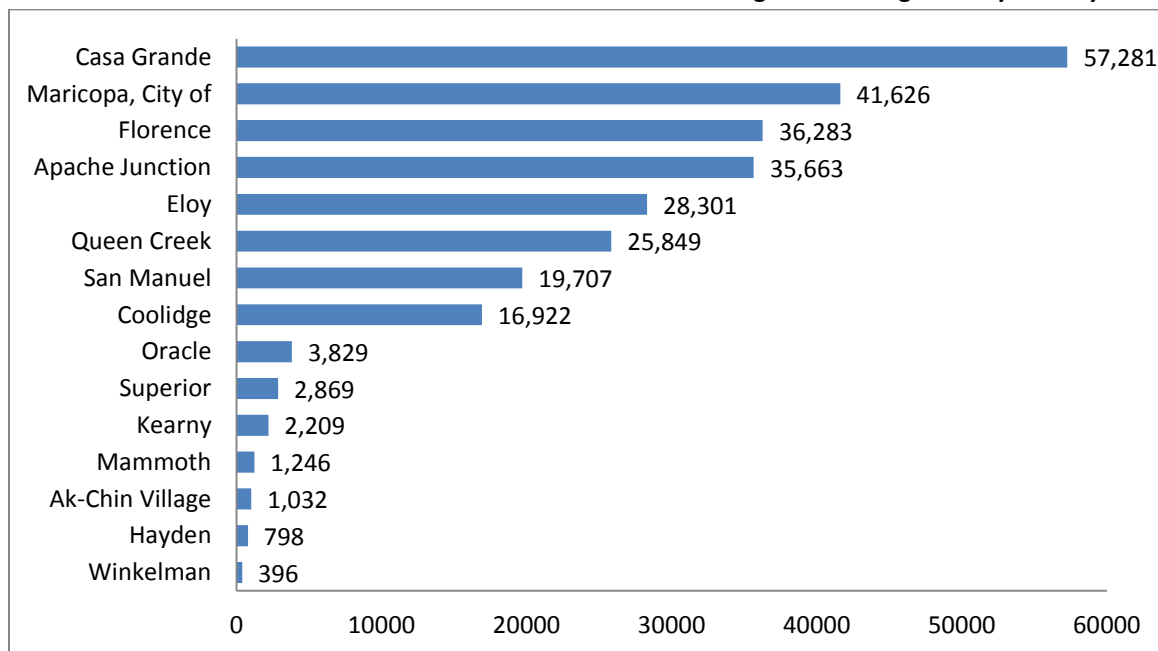


Exhibit 5 presents population data for the Ak-Chin Indian Community. Thirty-six percent of the population is 14 years of age or younger.

**Exhibit 5. Population Statistics for Ak-Chin Indian Community, 2012**

Locality	Total Population	Population 0-14	Single Parent Families
<b>Ak-Chin Indian Community</b>	893	319 (36%)	47%

Note. From *Ak-Chin Indian Community Primary Care Area 2012, Statistical Profile*, Bureau of Health Systems Development, Arizona Department of Health Services.

## Population Growth

As shown in Exhibit 6, from 2000 to 2012 Pinal County experienced an incredibly large growth in population of 115 percent. This growth rate is significantly higher than the statewide average of 28% and the national average of 12% growth over the same time period. However, population estimates for 2010-2012 suggest that the county's rate of population growth for the current decade will be much lower.

**Exhibit 6. Population Change, All Ages, 2000-2012**

Locality	2000	2010	2011	2012	Percentage Change 2000-2012
<b>Pinal County</b>	179,727	385,812	383,553	387,365	+115%
<b>Arizona</b>	5,130,362	6,410,810	6,467,315	6,553,255	+28%
<b>United States</b>	281,421,906	309,326,225	311,587,816	313,914,040	+12%

Note. From *Profile of General Demographic Characteristics: Census 2000 Summary File (SF-1) 100-Percent Data*; *Profile of General Population and Housing Characteristics: 2010 (DP-1)*; *Annual Estimates of the Resident Population: April 1, 2010 to July 1, 2012*, United States Census Bureau.

Data are also available for children under five years of age from U.S. Census Bureau estimates. Exhibit 7 shows that from 2000 to 2012, the number of children in this age group increased in Pinal County by 122%, as compared to a 15% increase statewide. It is unclear why estimates for the population of children under five years of age decreased from 2010 to 2012.

**Exhibit 7. Population Change, Children Under Five Years Old, 2000, 2010, 2011, 2012**

Locality	2000	2010	2011	2012	Percentage Change 2000-2012
<b>Pinal County</b>	12,066	30,885	28,468	26,810	+122%
<b>Arizona</b>	382,386	455,720	445,490	439,633	+15%
<b>United States</b>	19,175,798	20,189,418	20,127,889	19,999,344	+4%

Note. From *Profile of General Demographic Characteristics: Census 2000 Summary File (SF-1)*; *Annual Estimates of the Resident Population for Selected Age Groups by Sex for the United States, States, Counties, and Puerto Rico Commonwealth and Municipios: April 1, 2010 to July 1, 2012*, *Annual Estimates of the Resident Population by Sex, Race, and Hispanic Origin: April 1, 2010 to July 1, 2012*, United States Census Bureau.

## Trends in Population Changes by Community

Exhibit 8 shows population trends by community and for Pinal County as a whole for the last five reported years. Towns and cities in Pinal County for which data are available had highly variable growth rates between 2008 and 2012. The largest increases in population over this period occurred in Eloy (35%) and Florence (27%), while the largest decreases in population occurred in Mammoth (43%) and Kearny (39%).

**Exhibit 8. Population Change by Community, 2008-2012**

Locality	2008	2009	2010	2011	2012	Percentage Change 2008-2012	Percentage Change 2011-2012
<b>Ak-Chin Village</b>	NA	1,097 <sup>†</sup>	862 <sup>†</sup>	NA	893	NA	NA
<b>Apache Junction</b>	33,515	34,284	35,840	36,245	36,613	9%	1%
<b>Casa Grande</b>	41,995	43,878	48,571	49,471	49,974	19%	1%
<b>Coolidge</b>	10,607	11,079	11,825	11,861	11,882	12%	0%
<b>Eloy</b>	12,932	13,308	16,631	17,103	17,448	35%	2%
<b>Florence <sup>††</sup></b>	20,987	21,769	25,536	26,784	26,754	27%	0%
<b>Hayden</b>	814	662	662	658	652	-20%	-1%
<b>Kearny</b>	3,311	1,950	1,950	1,988	2,007	-39%	1%
<b>Mammoth</b>	2,599	1,426	1,426	1,453	1,470	-43%	1%
<b>Maricopa, City of</b>	44,866	43,482	43,482	44,327	44,803	0%	1%
<b>Oracle</b>	NA	3,686	3,686	NA	NA	NA	NA
<b>Queen Creek</b>	23,839	26,361	26,361	27,231	27,963	17%	3%
<b>San Manuel</b>	NA	3,551	3,551	NA	NA	NA	NA
<b>Superior</b>	3,366	2,837	2,837	2,889	2,900	-14%	0%
<b>Winkelman</b>	432	428	353	351	348	-19%	-1%
<b>Pinal County</b>	329,060	340,962	375,770	383,553	387,365	18%	1%

Note. From *Annual Estimates of the Resident Population: April 1, 2000 to July 1, 2009; April 1, 2010 to July 1, 2012*; Population Division, United States Census Bureau. NA = not available; † 2010 SF1 Sample Data; Arizona Department of Health Services.

Population projections provide insight into the geographically varied future population growth in Pinal County. The projections shown in Exhibit 9 predict that from 2014 to 2024 the localities that will experience the largest increase in population are Eloy (84%), Coolidge (65%), Florence (55%), and City of Maricopa (54%). Overall, the county as a whole is expected to experience a 39% increase in population over the same period. Consideration of population projections may facilitate timely deployment of early childhood resources.

**Exhibit 9. Population Projection by Community, 2014-2024**

Locality	2014	2019	2024	Percentage Change 2014-2024
<b>Apache Junction</b> <sup>†</sup>	37,089	41,305	45,793	23%
<b>Casa Grande</b>	51,329	58,554	66,897	30%
<b>Coolidge</b>	13,213	16,892	21,763	65%
<b>Eloy</b>	19,245	26,262	35,426	84%
<b>Florence</b>	28,467	36,409	44,103	55%
<b>Kearny</b>	1,984	2,085	2,116	7%
<b>City of Maricopa</b>	48,307	61,070	74,180	54%
<b>Mammoth</b>	1,512	1,749	1,891	25%
<b>Marana</b>	-	-	48	N/A
<b>Queen Creek</b> <sup>†</sup>	478	555	626	31%
<b>Superior</b>	2,917	3,140	3,308	13%
<b>Unincorporated</b>	195,985	229,119	265,693	36%
<b>Winkelman</b> <sup>†</sup>	-	-	-	-
<b>Pinal County</b>	403,526	477,140	561,844	39%

*Note.* From *Population Projections, Pinal Summary Table data set, 2013-2050 Sub-county Population Projections*, Arizona Department of Administration, Office of Employment and Population Statistics. <sup>†</sup> Indicates that only part of these localities are within Pinal County. There are no data for Marana for 2014 or 2019 because the small portion of Marana that is in Pinal County is not expected to have any population at those times. However, by 2024 that small portion of Marana will have a population of 48. N/A indicates “Not Appropriate” because no data was available for 2014.

## Other Information

It is essential that the estimate of population size and growth in the Pinal Region be considered within the context of the current economic conditions. Most of the data presented in the section above are through 2012 or 2013. Most of these data are for years during which the United States was in a period of recovery from one of the worst economic downturns in recent history. Although the U.S. economic recovery officially began in July 2009, the recession more negatively impacted Arizona's economy than that of other states. Some economists predict that 2014 will turn out to be the eight consecutive year of subpar growth for the state, with full recovery still years away (Arizona State University W. P. Cary School of Business, 2013).

## Additional Population Characteristics

Significant research has been done on factors of resilience and adversity that contribute to both positive and negative outcomes for youth. Most factors can be classified categorically. Societal factors of resilience include a person's sense of equality and fair treatment. A key community-level resilience factor is the measure of community involvement, while an important familial or parental factor of resilience is household structure. General child well-being falls into the category of child-specific risk while anti-bullying programs are protective factors (Ungar &

Liebenberg, 2013; Prince-Embury & Saklofski, 2013). Increasingly, research suggests that it is a complex inter-play of these factors that impacts early childhood outcomes (Braveman, Sadegh-Nobari, & Egerter, 2008; Florida State University Center for Prevention & Early Intervention Policy, 2005). While no single factor has been found to predict poor outcomes or be directly impacted by program efforts, all of these factors are important to consider in assessing the needs and assets of a region.

Many resilience and adversity factors have been correlated with demographic data to identify specific risks or needs that exist in communities. For example, in some studies parent household structure has been correlated with the likelihood of child abuse in the household, with single parent households at an increased risk (Oliver, Kuhns, & Pomeranz, 2006; U.S. Department of Health and Human Services, 2003). This information may also help to inform the need to target programs and services to specific cultural groups or sub-populations. For example, a high percent of Hispanic families in a region might suggest the importance of offering a parenting program/curriculum to young mothers that uses culturally and linguistically appropriate materials and activities (Espinosa, 1995; Hyslop, 2000; Santos & Reese, 1999; Worthington et al., 2011).

As demographic data provides important contextual information about factors that might impact early childhood outcomes, this section of the report includes additional information on the racial/ethnic makeup, immigrant and tribal status, family composition, language use, and other relevant characteristics of people in the Pinal Region. Whenever possible, data are included for children ages zero to five, as this is the target population for First Things First initiatives. The data presented is the most current and reliable information available at the time of this publication.

## Race/Ethnic Groups

Residents in Pinal County are diverse in ethnicity and race. As shown in Exhibit 10, Whites constituted the county's largest racial/ethnic group in 2012, making up 58% of the population, followed by Hispanics at 29%. Pinal County's ethnic breakdown largely reflects that of the state as a whole. Looking specifically at the Ak-Chin Indian community, 84% of this group self-identified as American Indian, followed by 9% that reported they were Hispanic.

**Exhibit 10. Race/Ethnicity, All Ages, 5-Year Average, 2008-2012**

Locality	American Indian or Alaska Native	Asian	Black	Hispanic or Latino	Hawaiian or Other Pacific Islander	Some Other Race	Two or More Races	White, Not Hispanic
<b>Pinal County</b>	5%	2%	4%	29%	<1%	<1%	2%	58%
<b>Arizona</b>	4%	3%	4%	30%	<1%	<1%	2%	58%
<b>United States</b>	<1%	5%	12%	16%	<1%	<1%	2%	64%
<b>Ak-Chin Indian Community</b>	84%	0%	1%	9%	0%	0%	2%	3%

*Note.* From *Demographic and Housing Estimates 2008-2012 American Community Survey 5-Year Estimates*, United States Census Bureau; Percentages do not total 100% because Hispanic is an ethnic group. Racial groups total 100%.

Exhibit 11 displays the race and ethnicity of women who gave birth in Pinal County in 2011 and 2012 and compares those data to those of women statewide and in the United States who gave birth in the same years. More than half of total births in Pinal County 2012 (53%) were to mothers who self-identified as white, non-Hispanic, which is higher than the statewide rate of 45% but on par with the U.S. rate of 54%. Additionally, 32% of births in the county were to Hispanic/ Latina women, lower than the statewide rate of 39%. The race and ethnicity breakdown of mothers in Pinal County, Arizona, and the United States showed very little change from 2011 to 2012. Although data are provided for only two years, a long-term increase in the percentage of Hispanic mothers living in the region may have implications for attention to cultural competency in the provision of maternal health and early childhood services.

**Exhibit 11. Race/Ethnicity of Mothers, 2011 and 2012**

Race/Ethnicity	Pinal County		Arizona		United States	
	2011	2012	2011	2012	2011	2012
<b>White, Non-Hispanic</b>	53%	52%	45%	45%	54%	54%
<b>Hispanic or Latino</b>	32%	32%	38%	39%	23%	23%
<b>Black or African American</b>	4%	5%	5%	6%	15%	15%
<b>American Indian or Alaskan Native</b>	8%	9%	7%	6%	1%	1%
<b>Asian or Pacific Islander</b>	2%	2%	4%	4%	6%	7%
<b>Other or Unknown</b>	<1%	<1%	<1%	1%	NA	NA

Note. From Resident Births by Mother's Age Group, Race/Ethnicity, County of Residence, and Year, Arizona, 2011 and 2012, Arizona Department of Health Services, Health Status and Vital Statistics; Births: Preliminary Data for 2012, Volume 62, Number 3, 2013, Centers for Disease Control, National Vital Statistics Reports.

## Immigrant Status

An immigrant family is defined as one in which at least one parent is foreign-born. Even though many of the children in immigrant families are citizens, these children face unique challenges compared to their peers. Research suggests that children from immigrant families are less likely to be prepared to start kindergarten (Crosnoe, 2007). In addition, mothers of immigrant families may lack access to or feel uncomfortable accessing preventive health care (such as prenatal care), which has been shown to positively impact youth outcomes. Additionally, foreign-born individuals may not seek services for themselves or their children in fear of having their immigration status questioned, even if they are legal citizens (Duncan & One, 2012; Southwest Institute for Research on Women et al., 2011).

Changes made to Arizona immigration laws in 2010 may have additional implications for service utilization by immigrant families in the state. The act, entitled Support Our Law Enforcement and Safe Neighborhoods (§ 1070), allows law enforcement officials to question individuals for whom they have reason to believe may be in the country illegally. Some sources suggest that many



individuals and families in Arizona are seeking services in other states or not accessing services because they are afraid of this legislation (González, 2011; Reese & Sakal, 2011; Tyler 2010, Toomey et al., 2014). Research suggests that some immigrant parents may be hesitant to send their children to school or come to parent-teacher meetings out of fear of being subject to immigration law enforcement activities. The full implications of this law on service access, availability, and utilization is not yet known.

It is estimated that about 556,000 people in Arizona are foreign-born, non-U.S. citizens and that 28% of the state's children under the age of 18 are foreign born or live with at least one foreign-born parent (U.S. Census, 2014; Kidscount.org, n.d.) According to the National Center for Children in Poverty (n.d.), in 2011 78% of ages 0-5 children of immigrant parents live in low-income families, as compared to 49% of children from native-born parents.

The American Community Survey's 1-year estimate indicates that 90% of the people in Pinal County are native-born, U.S. Citizens, as compared to 86% statewide (Exhibit 12). It is possible that the number of immigrant families living in Arizona may be undercounted because families living illegally in the United States may avoid participation in the U.S. Census, limit their access to services where their information would be documented, and minimize their involvement in any system that could result in deportation.

**Exhibit 12. Population by Citizenship Status, 5-Year Average, 2008-2012**

Locality	Native-Born, U.S. Citizen	Foreign-Born, Naturalized Citizen	Foreign-Born, Non-U.S. Citizen
<b>Pinal County</b>	331,304 (90%)	12,557 (3%)	24,513 (7%)
<b>Arizona</b>	5,542,160 (86%)	312,159 (5%)	556,660 (9%)
<b>United States</b>	269,354,406 (87%)	17,639,207 (6%)	22,145,098 (7%)

Note. From *Selected Social Characteristics in the United States 2008-2012*, American Community Survey 5-Year Estimates, United States Census Bureau.

## Family Composition

The structure of American families has changed over the past few decades. Many families no longer consist of a traditional mother/father household. Instead, many are teenage mothers caring for their children, single-parent households or grandparents or other relative(s) as primary caregivers (AARP, 2010; Annie E. Casey Foundation KidsCount Data Center, n.d.; Teachman, Tedrow, & Crowder, 2000). The full impact of different family arrangements on youth is not fully known. Research has shown that children of teenage mothers are at increased risk of high BMI and score lower on a variety of cognitive tests as compared to children born to older mothers (Cornelius et al., 2009). Children born to teen mothers face higher rates of abuse than those born to women who delay





childbearing (Robertson, Lang and Bachim, 2014; Schuyler Center for Analysis and Advocacy, 2008). A majority of teen mothers never complete high school, making it difficult for them to ever obtain good paying employment; their children are more likely to live in poverty (Schuyler Center for Analysis and Advocacy, 2008). A recent study (Osuchowski-Sanchez et al., 2013) noted disconnection to family and community as a barrier to success for Hispanic teen mothers. The authors claim that the lack of support for such teen mothers is intertwined with poverty and a culture of closed communication.

The number of families for which grandparents are raising their grandchildren is also increasing. Grandparents as caregivers may require unique resources and face certain parenting challenges. One consideration is that youth often enter the care of their grandparent due to negative circumstances related to their biological parents, such as the death of a parent, drug or alcohol abuse, incarceration, and mental health issues. This situation may contribute to increased risk factors like rates of mental health disorders and behavioral problems for youth (Dunifon, 2013, Williams, 2011).

The following section details the composition of families in Pinal County. The United State Census defines a household as including “all the people who occupy a housing unit as their usual place of residence.” A “family household” is composed of “a householder [i.e., “head of household”] and one or more people living in the same household who are related to the householder by birth, marriage, or adoption.” Individuals living in a household who are not related to the householder are not counted as part of their family. Some family households have children, while others do not. It is important to consider specific support needs of different family types in order to help ensure positive outcomes for all children.

American Community Survey 5-year estimates for 2008-2012 shows that in 2012, 22% of family households in Pinal County were married couples with children (Exhibit 13). Female-headed family households represented 7% and male-headed households represented 3%. The figures for married couples with children are slightly higher than state and national data. However, the percent of male-headed households with children is less than half the statewide percentage and the percentage of female-headed households is twice the statewide rate.

**Exhibit 13. Composition of Family Households with Children 0-18 Years of Age, 2008-2012**

Locality	Husband-Wife Married Households	Female-Headed Household, No Spouse	Male-Headed Household, No Spouse
<b>Pinal County</b>	26,457 (22%)	8,541 (7%)	3,889 (3%)
<b>Arizona</b>	453,958 (19%)	65,749 (3%)	171,681 (7%)
<b>United States</b>	23,426,943 (20%)	2,595,537 (2%)	8,462,168 (7%)

*Note.* From *Households and Families 2008-2012, American Community Survey 5-Year Estimates*, United States Census Bureau. Percentages refer to total number of households, including households without children under 18 years of age. Percentages for each of the geographical divisions (i.e. Pinal County, Arizona, and the United States) do not add up to 100% because data are not included for family households without children under 18 years of age present or for non-family households.

The same breakdown of household type that is shown for Pinal County is not available for the Ak-Chin Indian Community. However, data that are available, presented in Exhibit 14, show that almost half (47%) of the families in the Ak-Chin Indian Community are single parent families.

**Exhibit 14. Population Statistics for Ak-Chin Indian Community, 2012**

Locality	Total Population	Single Parent Families
<b>Ak-Chin Indian Community</b>	1,037	47%

*Note.* From *Ak-Chin Indian Community Primary Care Area 2012, Statistical Profile*, Bureau of Health Systems Development, Arizona Department of Health Services.

## Grandparents as Caregivers

Exhibit 15 shows that 51% of Pinal County grandparents that live in a shared living situation with their adult children and grandchildren have assumed primary caregiving responsibility for their grandchildren. This figure exceeds the statewide and national rates of 42% and 40%, respectively. Moreover, 19% of all grandparents in such a shared living situation have been caregivers for five or more years, exceeding the statewide rate of 15%. This comparatively high rate of grandparents acting as primary caregivers of their grandchildren in the county suggests a need for further investigation by the Pinal Regional Partnership Council to determine if their needs are being met.

**Exhibit 15. Grandparents' Responsibility for Grandchildren, 5-Year Average, 2008-2012**

Locality	Grandparents Living with Own Grandchildren under 18	Grandparents Living with, Responsible for Grandchildren	Number of Years Responsible For Grandchildren			
			<1	1-2	3-4	5+
<b>Pinal County</b>	9,096	4,638 (51%)	872 (10%)	1,213 (13%)	839 (9%)	1,714 (19%)
<b>Arizona</b>	154,705	64,163 (42%)	14,806 (10%)	15,407 (10%)	10,332 (7%)	23,618 (15%)
<b>United States</b>	6,850,491	2,723,744 (40%)	600,275 (9%)	649,621 (10%)	449,204 (7%)	1,024,644 (15%)

*Note.* From *Selected Social Characteristics in the United States 2008-2012, American Community Survey 5-Year Estimates*, United States Census Bureau. Percentages are computed using the number of grandparents living with their own grandchildren under 18 as the denominator.

## Teen Parents

Exhibit 16 shows that the percent of births from teenage mothers in Pinal County has declined from slightly from 11% in 2008 but has remained at 10% for the last three years. From 2008 to 2010, the rate of teen births in Pinal County was lower than that of the state as a whole. However, for the last two years the Pinal rate has exceeded the state rate. Although in each year from 2007 to 2010 the Pinal teen birth rate was 1% lower than the statewide rate, in 2011 both rates are the same. The percent of births to teen mothers in both Pinal County and the state exceeded the rate for the United States in the four most recent years for which data is available for all three.

**Exhibit 16. Number of Teen Births, 2008-2012**

Locality	2008	2009	2010	2011	2012
Pinal County	11%	11%	10%	10%	10%
Arizona	12%	12%	11%	10%	9%
United States	10%	10%	9%	8%	N/A

Note. From *Resident Births by Mother's Age Group, Race/Ethnicity, County of Residence and Year, Arizona, 2000-2009, 2010-2012*; Arizona Birth and Maternal Characteristics, 2009-2012, Arizona Department of Health Services, Health Status and Vital Statistics.

Exhibit 17 shows that the majority of teen births in Pinal County from 2009 to 2011 was from 18 to 19 year olds (7% annually), followed by 15 to 17 year olds (3% annually). Over the same period, less than 1% of births were from teens under 15 years of age. The percentage of teen births for Pinal County in 2012 was higher than that of Arizona and the United States, which suggests that increased outreach and/or prevention efforts targeting high school age teens could be a useful addition to county services.

**Exhibit 17. Number of Teen Births by Age Sub-Group, 2010-2012**

Age Range	Year	Pinal	Arizona	United States
<15 Years	2010	*	106 (<1%)	4,500 (<1%)
	2011	*	101(<1%)	3,974 (<1%)
	2012	*	70(<1%)	3,674 (<1%)
15–17 Years	2010	156 (3%)	2,921 (3%)	109,193 (3%)
	2011	133 (3%)	2,447 (3%)	95,554 (2%)
	2012	121 (3%)	2,430 (3%)	82,503 (2%)
18–19 Years	2010	349 (7%)	6,401 (7%)	258,559 (6%)
	2011	341 (7%)	5,887 (7%)	234,242 (6%)
	2012	329 (7%)	5,620 (7%)	188,385 (4%)
Total Teen Births	2010	511 (10%)	9,428 (11%)	372,252 (9%)
	2011	481 (10%)	8,435 (10%)	333,771 (8%)
	2012	450 (10%)	8,120 (9%)	274,528 (7%)

Note. From *Tables 16, 17, Selected Characteristics of Newborns and Resident Women Giving Birth by County, 2010, 2011, 2012*, Arizona Department of Health Services, Health Status and Vital Statistics; Births: Preliminary Data for 2012, 62 (3), 2013, Centers for Disease Control and Prevention, *National Vital Statistics Report*. Percentages are computed from 2010 births in Pinal County (4,990), Arizona (87,053), and U.S. (4,000,279); 2011 births in Pinal County (4,607), Arizona (85,190), and U.S. (3,953,593 ); 2012 births in Pinal County (4,656), Arizona (85,725), and U.S (3,952,937). Percentages are based on total number births to women of all ages, not only births to teenage mothers. An asterisk indicates a low count was suppressed by the Arizona Department of Health Services to ensure confidentiality.

## Language Usage

Aside from English, Spanish is the most commonly spoken language in Arizona because of the state's close proximity to the Mexican border and large Hispanic/Latino population. Other languages spoken in Arizona include several Native American languages, such as Navajo and Apache. Studies suggest that Hispanics for whom English is their second language continue to lag behind those for who English is their first language on several educational measures. One study found that Hispanic students who did not have a basic understanding and knowledge of oral English prior to entering kindergarten achieved lower marks in reading and math by the end of fifth grade (Reardon & Galindo, 2009).

Another study stressed the importance of proficiency in English on the development of reading skills by children from households that spoke a language other than English. Children proficient in English at entrance to kindergarten demonstrated greater success in reading skill development throughout elementary school, compared to their counterparts who had limited English proficiency (Kieffer, 2008). A 2011 case study utilized several tools to better support these students, including a thorough language skill assessment aligned with academic content standards, a “menu” of individualized program models, and referring families to support resources (Marietta & Brookover, 2011). The findings of Solari et al. (2014) suggest that providing English language learners intensive instruction in letter knowledge and phonological awareness (i.e., letter sounding) in kindergarten can lead to improved oral reading fluency in early grades of school. These studies cumulatively suggest that English language learners are in need of both high quality and individualized early childhood education to help them achieve to the same extent as native English speakers.

In Pinal County, 23% of the population five years of age and older sometimes or always speak a language other than English at home (Exhibit 18). This figure is lower than the statewide rate of 27% but above that of the United States. Nineteen percent of Pinal residents speak Spanish in their home, lower than the statewide rate of 21%. Of county residents who speak a language other than English at home, 6% self-reported speaking English “less than well”, well below the statewide rate of 10%.

**Exhibit 18. Language Spoken at Home, Population 5 Years and Older, 2008-2012**

Locality	Only English	Languages Other Than English: All	Languages Other Than English: Spanish	Speaks English “Less Than Very Well,” Self-Reported
<b>Pinal County</b>	262,982 (77%)	76,820 (23%)	63,800 (19%)	21,901 (6%)
<b>Arizona</b>	4,352,680 (73%)	1,602,924 (27%)	1,224,570 (21%)	593,745 (10%)
<b>United States</b>	229,616,064 (80%)	59,384,763 (21%)	36,836,280 (13%)	25,081,122 (9%)

Note. From *Selected Social Characteristics in the United States 2008-2012*, American Community Survey 5-Year Estimates, United States Census Bureau.

## Economic Circumstances

The recovery from the recent recession has been the weakest of all economic recoveries since the end of WWII, only beginning to gain traction in 2014 (Council on Foreign Relations, 2013; Putnam, 2014). However, the recovery continues to be geographically uneven (National Association of Counties, 2014). When the recession began in December 2007 the U.S. unemployment rate had been at 5.0% or below for 30 months (U.S. Bureau of Labor Statistics, 2012); in January 2014 it was 6.6%. Moreover, in 2013, the percentage of long-term unemployed, those who have been unemployed for 27 weeks or more, still exceed the pre-recession levels in most states. In Arizona, 31.6% of the unemployed were in this category (Cooper, 2014). This suggests that numerous families remain without the wages needed to maintain a reasonable standard of living.

The effects of economic hardship can extend beyond a reduction in family household income to include complications to health and well-being. Some mental health professionals have reported a growing need for services (Collier, 2009). Likewise, doctors have reported more cases of alcohol abuse, drug overdose, mental health problems, and physical problems such as abdominal and chest pain associated with stress. Families may also avoid accessing services such as dental or eye care if they lack access to health insurance. Non-profit support service providers have also reported an increase in service-users that exhibit signs of anxiety and frustration from economic stress (Reardon, 2009).

A substantial body of research has documented lower academic achievement among low-income children relative to more affluent children (Gershoff, Aber, Raver, & Lennon, 2007). Academic performance of children can also be negatively impacted by parental unemployment or unstable employment (Adrian & Coontz, 2010). Low socioeconomic status does not however necessitate poor school readiness; quality early-childhood education along with increased parental involvement can substantially attenuate risk for academic underachievement (Kingston et al., 2013).

Studies have also shown that household food insecurity rates have increased alongside economic hardship (Houshyar & McHugh, 2010; March, Cook & Ettinger de Cuba, 2009; Szabo, 2010). Houshyar and McHugh of the First Focus Foundation for Child Development reported that in 2008, one year into the recent recession, 21% of households with children were estimated to have been food insecure, the highest percentage observed since 1995 when yearly measurement started. Additionally, the number of children living in food insecure households increased from 17% in 2007 to 23% in 2008, making it the most dramatic spike in food insecurity since the United States Department of Agriculture began measuring in 1995. Approximately 8.3 million children lived in households in which one or more children were food insecure in 2012 (Coleman-Jensen, Nord, & Singh, 2013).

Federal programs, such as Temporary Assistance for Needy Families (TANF) and the Supplemental Nutrition Assistance Program (SNAP) are in place to help families who are experiencing economic hardships. However, recent federal legislative action resulted in a cut in the amount of benefits received by SNAP recipients. It is estimated that approximately 1.1 million Arizona residents will lose a total of \$109 million in SNAP benefits from November 2013 through September 2014 (Rosenbaum & Kieth-Jennings, 2013). In addition, many local service providers who are typically able to step in and meet the needs of families in their areas are struggling to keep up with an increase in demand for services. A study by the Urban Institute (2010) found that as non-profits face a greater demand for services, they have also experienced a decrease in donations and increased difficulty in obtaining government funding, often resulting in staffing cuts. Pinal County food pantries and other organizations that serve low-income families had had difficulty keeping up with the demand for such assistance (Gemme, 2013).

Both national and local economic climates have major implications for health, child care, and educational needs of families with young children and the availability of support resources. This section of the Regional Needs and Assets report highlights historical and recent economic circumstances in the Pinal Region, examining key economic indicators including the percentage of the population living below the federal poverty line, median income, unemployment rates, and net job flows.

## Children and Families Living Below Federal Poverty Level

According to the 5-year estimate for all families, from 2008 to 2012 (Exhibit 19), 11% of Pinal County families lived below the Federal Poverty Level (FPL), which is slightly less than the 12% statewide average and equal to the national average. Regarding Pinal families with children under five years of age, 14% live below the FPL as compared to 19% statewide and 18% nationally. The percent of married couple families with children under five living below the FPL in Pinal County was 9%, lower than the statewide rate of 11%. However, the poverty rate for single female-headed households in Pinal County with young children is significantly higher at 43%, almost the same as the statewide rate of 44% and the national rate of 47%. These data indicate that female-headed households, particularly those with children under five years old, are at heightened risk for poverty and potentially have the greatest need for assistance to meet their young children's health and early education needs.

**Exhibit 19. Percentage of Families Income Below Poverty Level, 5 Year Average, 2008-2012**

Locality	Families	Families With Related Children < 5 years	Married Couple Families with related children < 18 years	Married Couple Families With Related Children < 5 year	Female- Headed Household, No Husband Present with related children < 18 years	Female- Headed Household, No Husband Present With Related Children < 5 years
<b>Pinal County</b>	11%	14%	9%	6%	37%	43%
<b>Arizona</b>	12%	19%	11%	9%	38%	44%
<b>United States</b>	11%	18%	8%	7%	39%	47%

Note. From *Selected Economic Characteristics in the United States, 2008-2012 American Community Survey 5-Year Estimates*, United States Census Bureau.

Additional community-level data regarding children living in poverty in the Pinal Region is provided by the United States Census Small Area Income and Poverty Estimates (SAIPE). Exhibit 20 shows that SAIPE's county-level estimates show that 24% of all Pinal County children under 18 years of age were living in poverty in 2014.

**Exhibit 20. Estimated Number of Individuals Living in Poverty, 2012**

Locality	All Ages	Under 18 Years Old	Under 5 Years Old
<b>Pinal County</b>	63,509 (18%)	22,837 (24%)	NA
<b>Arizona</b>	1,195,931 (19%)	430,378 (27%)	130,571 (31%)
<b>United States</b>	48,760,123 (16%)	16,396,863 (23%)	5,014,970 (26%)

Note. From Small Area Income and Poverty Estimate (SAIPE) Program 2012, *All Ages in Poverty, Under Age 18 in Poverty, Under Age 5 in Poverty, estimates for 2012*, Interactive SAIPE Data and Mapping Tool, United States Census Bureau. NA indicates data not available.

Exhibit 21 shows specifically the income, poverty and unemployment statistics for the Ak-Chin Indian Community for 2012. According to Arizona Department of Health Services data, in 2012 32% of the population in the Ak-Chin Indian Community lived below the Federal Poverty Level. Thirty-one percent of the community's children under 12 years of age lived in poverty.

**Exhibit 21. Poverty Rate in Ak-Chin Indian Community, 2012**

Poverty Indicator	Percentage of Population
Population below 100% FPL	32%
Population below 200% FPL	61%
Children under 12 in Poverty	31%

*Note. From Ak -Chin Indian Community Primary Care Area 2012, Statistical Profile, Bureau of Health Systems Development, Arizona Department of Health Services.*

SAIPE 2011 and 2012 estimates for school districts show the varying levels of poverty in the Pinal Region (Exhibit 22). In 2012, the percentage of children ages 5-17 living in poverty ranged from 13% for Maricopa Unified and Oracle Unified to 40% for Eloy Elementary District. Of the 15 school districts for which SAIPE has data, eight had child poverty rates of 22% or higher in 2012. However, in nine of the 15 districts the percent of children living in poverty decreased from 2011 to 2012. In one district (Ray Unified School District), the number of children living in poverty decreased by almost 50% from 2011 to 2012.

**Exhibit 22. Estimated Poverty for Children Age 5-17 by School District, 2011 and 2012**

School District	Total Population of District		Children Ages 5-17		Children Ages 5-17 in Families in Poverty	
	2011	2012	2011	2012	2011	2012
Apache Junction Unified District	58,013	58,675	7,267	7,348	1,993 (27%)	1,811 (25%)
Casa Grande Elementary District	61,936	62,643	8,881	8,980	2,440 (27%)	2,373 (27%)
Coolidge Unified District	35,135	35,536	7,822	7,909	1,997 (26%)	1,992 (25%)
Eloy Elementary District	6,770	6,847	1,046	1,058	430 (41%)	428 (40%)
Florence Unified District	72,304	73,130	12,716	12,857	2,432 (19%)	2,513 (20%)
J.O. Combs Unified District	35,538	35,944	8,661	8,757	1,454 (17%)	1,261 (14%)
Mammoth-San Manuel Unified District	5,565	5,628	1,100	1,113	287 (26%)	296 (27%)
Maricopa Unified District	48,198	48,748	10,544	10,661	1,386 (13%)	1,421 (13%)
Oracle Elementary District	13,883	14,041	1,010	1,021	142 (14%)	136 (13%)
Picacho Elementary District	8,424	8,520	128	130	34 (27%)	28 (22%)

School District	Total Population of District		Children Ages 5-17		Children Ages 5-17 in Families in Poverty	
	2011	2012	2011	2012	2011	2012
<b>Ray Unified District</b>	3,900	3,944	740	748	241 (33%)	126 (17%)
<b>Red Rock Elementary District</b>	3,429	3,468	567	573	123 (22%)	95 (17%)
<b>Stanfield Elementary District</b>	5,293	5,353	787	795	220 (28%)	261 (33%)
<b>Superior Unified District</b>	3,429	3,468	564	571	131 (23%)	149 (26%)
<b>Toltec Elementary District</b>	14,469	14,634	1,886	1,907	428 (23%)	410 (22%)

*Note.* From *Table 1: 2011; Table 1: 2012 School district estimates*, United States Census Small Area Income and Poverty Estimates (SAIPE).

Estimates are available only for school districts identified in the U.S. Census Bureau's school district mapping project. The U.S. Census states that these estimates have a confidence interval of 90%, which means the actual number may be 5% higher or lower.

Arizona Department of Education data on economically disadvantaged students attending public and charter schools in Pinal County from 2010 to 2013 provide another picture of the economic situation for children in the region (Exhibits 23 and 24). These data show that for the 4-year period the majority of the region's school districts the percentage of students who were economically disadvantaged surpassed 50%. The reasons for yearly variation in percentages in several charter schools and districts are not known, but it's been suggested that some school reports may have been missing data.



**Exhibit 23. Preschool and Elementary Economic Disadvantage by School District, 2010-2013**

School District	Year	Student Count	Number with Economic Disadvantage	Percentage with Economic Disadvantage
<b>Apache Junction Unified District (85218/85219/85220)</b>	2010	2,944	1,723	59%
	2011	2,668	1,587	59%
	2012	2,601	1,583	61%
	2013	2,563	1,679	66%
<b>Casa Grande Elementary District (85222)</b>	2010	6,317	4,010	63%
	2011	5,973	3,541	59%
	2012	5,773	2,783	48%
	2013	5,679	1,839	32%
<b>Coolidge Unified District (85128/85142/85228/85242)</b>	2010	2,361	1,703	72%
	2011	2,183	1,696	78%
	2012	1,960	1,413	72%
	2013	1,919	1,465	76%
<b>Eloy Elementary District (85231)</b>	2010	916	850	93%
	2011	858	733	85%
	2012	833	678	81%
	2013	769	659	86%
<b>Florence Unified School District (85132/85232/85242/85243)</b>	2010	4,865	N/D	N/D
	2011	4,729	2,530	54%
	2012	4,583	2,531	55%
	2013	4,381	2,395	55%
<b>J O Combs Unified School District (85140/85240)</b>	2010	2,932	1,190	41%
	2011	2,755	1,253	45%
	2012	2,728	1,110	41%
	2013	2,782	1,219	44%
<b>Mammoth-San Manuel Unified District (85631)</b>	2010	663	470	71%
	2011	560	369	66%
	2012	509	351	69%
	2013	527	382	72%
<b>Maricopa Unified School District (85239)</b>	2010	3,989	2,039	51%
	2011	3,576	1,785	50%
	2012	3,401	1,832	54%
	2013	3,343	1,915	57%
<b>Mary C O'Brien Accommodation District (85222)</b>	2010	121	121	100%
	2011	129	129	100%
	2012	126	126	100%
	2013	119	119	100%
<b>Oracle Elementary District (85623)</b>	2010	444	268	60%
	2011	443	*	<1%
	2012	381	*	<1%
	2013	396	228	58%
<b>Picacho Elementary District (85241)</b>	2010	158	136	86%
	2011	186	186	100%
	2012	156	156	100%
	2013	158	158	100%

School District	Year	Student Count	Number with Economic Disadvantage	Percentage with Economic Disadvantage
<b>Pinal County Special Education Program (85222)</b>	2010	*	0	0.0%
	2011	N/D	N/D	N/D
	2012	N/D	N/D	N/D
	2013	N/D	N/D	N/D
<b>Ray Unified District† Kearney (85137/85237)</b>	2010	299	175	59%
	2011	297	182	61%
	2012	288	184	64%
	2013	291	164	56%
<b>Red Rock Elementary District (85245)</b>	2010	264	0	0.0%
	2011	279	0	0.0%
	2012	274	0	0.0%
	2013	243	0	0.0%
<b>Stanfield Elementary District (85272)</b>	2010	572	572	100%
	2011	539	539	100%
	2012	504	504	100%
	2013	475	475	100%
<b>Superior Unified School District (85273)</b>	2010	259	187	72%
	2011	253	203	80%
	2012	265	74	28%
	2013	263	129	49%
<b>Toltec Elementary District (85231)</b>	2010	1,132	809	71%
	2011	1,048	796	76%
	2012	955	692	72%
	2013	921	621	67%
<b>Region Total</b>	2010	31,384	15,077	48%
	2011	30,226	16,321	54%
	2012	29,384	15,095	51%
	2013	28,806	14,369	50%

Note. From Arizona Department of Education, (2014). [ADE data Revised Pull 01-31-14]. Unpublished raw data supplied by First Things First. The Arizona Department of Education uses eligibility for free and reduced lunches as its criterion for economic disadvantage. Large fluctuations in some school districts from year to year indicate the possibility of incomplete data collection. FTF has submitted a request for data verification to ADEE but no further information is available at this time. †This district is not entirely located in the Pinal Region. Data for Red Rock Elementary District appears low, but it is reported as it appears in the Arizona Department of Education dataset. An asterisk indicates a low count was suppressed to ensure confidentiality. N/D indicates no data was available.

**Exhibit 24. Charter Preschool and Elementary School Economic Disadvantage, 2010-2013**

School District	Year	Student Count	Number with Economic Disadvantage	Percentage with Economic disadvantage
Academy of Excellence, Inc. (85228)	2010	39	29	74%
	2011	35	14	40%
	2012	21	*	24%
	2013	20	18	90%
Eduprize Schools, LLC Queen Creek (85242)	2010	1,513	0	0.0%
	2011	1,708	105	6%
	2012	1,625	0	0.0%
	2013	1,642	0	0.0%
Excalibur Charter Schools, Inc. Apache Junction (85120/85220)	2010	235	193	82%
	2011	234	165	71%
	2012	257	204	79%
	2013	266	214	80%
Graysmark Schools Corporation (85138)	2010	N/D	N/D	N/D
	2011	N/D	N/D	N/D
	2012	42	0	0.0%
	2013	71	18	25%
Leading Edge Academy Maricopa Campus City of Maricopa, (85234/85238)	2010	N/D	N/D	N/D
	2011	91	32	35%
	2012	190	89	47%
	2013	220	127	58%
Legacy Traditional Charter School (85138/85286)	2010	543	0	0.0%
	2011	848	0	0.0%
	2012	909	319	35%
	2013	969	254	26%
Sierra Oaks School, Inc. Oracle (85623)	2010	53	26	49%
	2011	47	19	40%
	2012	50	33	66%
	2013	29	15	52%
The Charter Foundation, Inc. <sup>†</sup> (85019)	2010	N/D	N/D	N/D
	2011	N/D	N/D	N/D
	2012	202	94	47%
	2013	N/D	N/D	N/D
Region Total	2010	31,384	15,077	48%
	2011	30,226	16,321	54%
	2012	29,384	15,095	51%
	2013	28,806	14,369	50%

Note. From Arizona Department of Education, 2014. [ADE data Revised Pull 01-31-14]. Unpublished raw data supplied by First Things First. The Arizona Department of Education uses eligibility for free and reduced lunches as its criterion for economic disadvantage. Large fluctuations in some school districts from year to year indicate the possibility of incomplete data collection. FTF has submitted a request for data verification to ADEE but no further information is available at this time. <sup>†</sup>This school is not entirely located in the Pinal Region. An asterisk indicates a low count was suppressed to ensure confidentiality. N/D indicates no data was available.

## Household Income

Household income serves as another useful indicator for examining the economic status of families in Pinal County. According to the American Community Survey estimate, the average median household gross annual income for 2012 in Pinal County was \$55,959 (Exhibit 25). The data show that median family income in the Pinal County has increased by 42% between 2000 and 2012. The median income for Pinal County in 2012 was about 2% lower than the median income of the state as a whole and approximately 10% lower than that of the United States.

**Exhibit 25. Median Family Gross Annual Income, 2000 and 2012**

Locality	2000	2010	2011	2012	Percentage Change 2000-2012
<b>Pinal County</b>	\$39,548	\$54,896	\$49,012	\$55,969	+42%
<b>Arizona</b>	\$46,723	\$55,353	\$55,328	\$56,792	+22%
<b>United States</b>	\$50,046	\$60,609	\$61,455	\$62,527	+25%

Note. From Census 2000 *Demographic Profile Highlights; Selected Economic Characteristics 2010, 2011 and 2012*, American Community Survey, 1-Year Estimates, United States Census Bureau. 2000 Census data are in 1999 dollars.

Further examination of median family income reveals that there are major differences in median income for families based on family type. American Communities Survey estimates shown in Exhibit 26 indicate that in 2012 the median income of families with children under 18 in Pinal County was \$65,923 for married couple families, \$47,231 for male-headed families, and \$27,773 for female-headed families. This means that the median income of male-headed families and female-headed families is 72% and 39%, respectively, of the median income of married couple families. These data suggest that female-headed households with children constitute a significant group in need of assistance and that children living in such households would benefit from supplemental programs. Furthermore, the data suggest that attention be paid to male-headed families as well since their median household income is also significantly below that of married couple families.

**Exhibit 26. 2010 and 2012 Median Income of Families with Children Under 18 by Family Type**

Locality	Female-headed Families		Male-headed Families		Married Couples	
	2010	2012	2010	2012	2010	2012
<b>Pinal County</b>	\$27,453	\$27,773	\$42,041	\$47,231	\$63,965	\$65,923
<b>Arizona</b>	\$25,015	\$25,547	\$36,616	\$35,440	\$65,989	\$71,283
<b>United States</b>	\$23,184	\$23,151	\$35,051	\$36,253	\$77,443	\$81,222

Note. From *Median Family Income in the Past 12 Months (In 2010 Inflation-adjusted Dollars) by Family Type by Presence of Own Children Under 18 Years, 2010 American Community Survey 1-Year Estimates*; *Median Family Income in the Past 12 Months (In 2012 Inflation-adjusted Dollars) by Family Type by Presence of Own Children Under 18 Years, 2012 American Community Survey 1-Year Estimates*, U.S. Census Bureau.

## Employment and Unemployment

A region's unemployment rate may provide the most complete and up to date picture of its economic condition because it is an indicator that has been calculated monthly for many years and the latest data is no more than 1-2 months old. Moreover, it is calculated at the community level, allowing analysis of variation in economic conditions by locality.

Examination of the 2008-2013 unemployment rates for localities in Pinal County reveals the geographic variability of the recent economic recession and recovery from it in the region (Exhibit 27). The table below shows that in 2008, a majority of Pinal County communities had unemployment rates of 7% or more. In 2009, the unemployment rate peaked in the region, with rates ranging from 5.9% in Gold Canyon to 33.0% in San Tan Valley. Data from 2010-2013 show that the unemployment rate is decreasing in Pinal communities, but still remains far above the 2008 average. The unemployment rate for Pinal County, both including and excluding Native American reservations, was higher than that of the state as a whole for all of the reported years except 2013.

**Exhibit 27. Unemployment Rates for Pinal County Localities, 2008-2013**

Locality	2008	2009	2010	2011	2012	2013
Ak-Chin Village	8.9%	15.0%	14.3%	12.7%	11.1%	10.5%
Apache Junction <sup>†</sup>	5.0%	8.7%	8.3%	12.8%	10.5%	8.8%
Arizona City	4.0%	6.9%	6.6%	5.8%	5.0%	4.7%
Casa Grande	6.7%	11.5%	11.0%	11.2%	10.0%	8.9%
Coolidge	12.8%	20.8%	20.0%	17.9%	15.6%	14.9%
Eloy	10.6%	17.6%	16.8%	15.0%	13.0%	12.4%
Florence	7.1%	12.1%	11.6%	21.3%	18.5%	17.8%
Gold Canyon	3.4%	5.9%	5.6%	4.9%	4.2%	4.0%
Kearny Town	4.4%	7.6%	7.3%	6.4%	5.5%	5.2%
Mammoth	11.7%	19.1%	18.3%	16.4%	14.2%	13.6%
City of Maricopa	8.0%	13.5%	12.9%	10.3%	9.0%	8.2%
Oracle	7.6%	12.9%	12.3%	10.9%	9.4%	8.9%
Queen Creek <sup>€</sup>	0.0%	0.0%	0.0%	80.0%	67.3%	49.5%
San Manuel	10.2%	16.9%	16.2%	14.5%	12.5%	11.9%
San Tan <sup>¥</sup>	22.0%	33.4%	32.3%	29.5%	26.1%	25.0%
Stanfield	15.8%	25.1%	24.1%	21.8%	19.0%	18.2%
Superior	15.0%	24.1%	23.1%	20.8%	18.2%	17.4%
Pinal County	7.2%	12.2%	9.4%	10.3%	8.9%	8.4%
Pinal County Less Native American Reservations	6.6%	11.3%	10.8%	9.5%	8.2%	7.8%
Arizona	6.0%	9.8%	10.4%	9.4%	8.3%	7.9%
United States	5.8%	9.3%	9.6%	8.9%	8.1%	7.4%

Note. From *Arizona Employment Statistics Program Special Unemployment Reports 2000-2009, 2010-2013*, Arizona Department of Commerce, Office of Employment and Population Statistics; Labor Force Statistics from the *Current Population Survey* (age 16 and over), United States Department of Labor, Bureau of Labor Statistics. Rates are not seasonally adjusted. <sup>†</sup>Apache Junction data is for part of the city in Pinal County only. <sup>¥</sup>San Tan is a Census Designated Place, which [is] a settled concentration of population that is identifiable by name but [is] not legally incorporated under the laws of the state in which [it is] located." <sup>€</sup>Only part of Queen Creek is in Pinal County. Queen Creek's 0.0% unemployment rate for 2008-2010 was confirmed in a March 2014 phone call to the Office of Employment and Population Statistics.

Monthly unemployment data for 2013 provide information about the times of year when more families may be impacted by unemployment (Exhibit 28). These data show a gradual decline in unemployment from January through May 2013. Unemployment increased in June to 9.1% before gradually declining again from June through December, when unemployment stood at 7.5%.

**Exhibit 28. Unemployment Rate for Pinal County, January-December 2013**

Locality	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
<b>Pinal County</b>	9.1%	8.4%	8.4%	8.4%	7.8%	9.1%	8.9%	9.2%	8.7%	8.3%	7.3%	7.5%
<b>Arizona</b>	8.3%	7.7%	7.8%	7.8%	7.4%	8.5%	8.3%	8.7%	8.3%	8.0%	7.1%	7.3%
<b>United States</b>	7.9%	7.7%	7.5%	7.5%	7.5%	7.5%	7.3%	7.2%	7.2%	7.2%	7.0%	6.7%

*Note.* From *Arizona Employment Statistics Program Special Unemployment Report*, 2013, Arizona Department of Commerce, Office of Employment and Population Statistics; *Labor Force Statistics from Current Population Survey*, United States Department of Labor, Bureau of Labor Statistics.

Additional employment indicators offer a more comprehensive view of the economic situation for families in the Pinal Region. Exhibit 29 shows that in Pinal County, average monthly earnings fluctuated within a \$243 range (\$3,015-\$3,390) from the fourth quarter of 2010 through the first quarter of 2013. Average new hire wages also fluctuated during the period. Pinal County's net job flow was positive in all reported periods except for the fourth quarter of 2010, the first quarter of 2011, and the second quarter of 2012. Total employment has shown a relatively steady increase since the fourth quarter of 2011.

**Exhibit 29. Key Employment Indicators for Pinal County**

Indicators	2010 Q4	2011 Q1	2011 Q2	2011 Q3	2011 Q4	2012 Q1	2012 Q2	2012 Q3	2012 Q4	2013 Q1
<b>Average Monthly Earnings</b>	\$3,466	\$3,133	\$3,314	\$3,331	\$3,303	\$3,312	\$3,314	\$3,222	\$3,376	\$3,223
<b>Average New Hire Earnings</b>	\$2,401	\$1,913	\$2,144	\$2,411	\$2,204	\$1,997	\$2,314	\$2,300	\$2,393	\$2,251
<b>Job Creation</b>	2,478	2,591	4,081	3,319	4,250	3,149	2,532	3,949	3,733	3,120
<b>Net Job Flows</b>	-1,624	-156	936	1,304	2,540	1,064	-880	1,674	460	171
<b>New Hires</b>	7,126	6,326	7,639	7,343	8,528	7,838	7,444	8,352	8,932	7,817
<b>Separations</b>	10,709	7,543	9,442	7,832	8,591	8,261	10,152	8,602	10,141	9,276
<b>Total Employment</b>	54,127	51,440	52,611	50,511	53,856	54,364	56,360	53,273	57,628	59,172
<b>Turnover</b>	10.2%	9.3%	7.9%	9.5%	9.4%	10.4%	8.9%	8.5%	10.3%	N/A

*Note.* U.S. Census Bureau, Local Employment Dynamics, QWI (Quarterly Workforce Indicators) Online (NAICS), *LEHD State of Arizona County Reports – Quarterly Workforce Indicators*. LEHD is the acronym for Longitudinal Employer-Household Dynamics. NAICS is the acronym for the North American Industry Classification System. The data presented are for all sectors included in the system. NA indicates no data is available for an indicator. The fourth quarter of 2012 is the last period for which a full set of data is available.

## Other Relevant Economic Indicators

Poverty, median income, unemployment, and key employment data presented in this section provide a picture of recent economic conditions in Pinal County. Information about participation in state and federal benefit programs further enhances understanding of the economic environment of a community. The federal and state governments offer a variety of assistance programs utilized by Pinal County residents including Temporary Assistance to Needy Families (TANF), the Supplemental Nutrition Assistance Program (SNAP), free or reduced school lunches, the Women, Infants, and Children program (WIC), unemployment benefits, and special services for children with developmental disabilities.

TANF is a program of the Office of Family Assistance of the United States Department of Health and Human Services that funds state efforts to provide financial assistance and work opportunities to needy families. TANF enrollments are low and have declined in recent years because of state legislative actions to restrict program benefits. In July 2010, the lifetime benefit limit for TANF was reduced from 60 months to 36 months, resulting in an immediate end in benefits to participating families that had been receiving benefits for more than 36 months. In August 2011, the lifetime benefit was further reduced from 36 months to 24 months; families that had received benefits for more than 24 months were removed at that time.

Exhibits 30-32 provide information about TANF participation by families with children under five years of age in Pinal County. The number of families with children ages 0-5 enrolled in TANF steadily decreased from January 2009 to January 2012 (Exhibit 29). By the last reported month, January 2012, the number of Pinal County families with children ages 0-5 enrolled in TANF was down to 384, a 54% decrease from the January 2009 high point. The downward enrollment trend in Pinal County exceeded the 39% decreases in enrollment for such families over the period, which suggests county-level factors may have also impacted TANF enrollment.

**Exhibit 30. Families with Children Ages 0-5 Enrolled in TANF, 2007-2012**

Locality	June 2007	Jan. 2009	June 2009	Jan. 2010	July 2010	Jan. 2011	July 2011	Jan. 2012
Pinal County	774	837	825	761	544	444	391	384
Arizona	15,527	18,477	18,045	18,129	13,651	10,289	9,776	9,427

*Note.* From Arizona Department of Economic Security (DES), 2014. [SNAP-TANF2010, SNAP-TANF 2014]. Unpublished raw data received from First Things First State Agency Data Request. The months for which DES provided data vary by year. No data was provided for 2008.

The zip code level data included in Exhibit 31 show that between June 2007 and January 2012 most localities followed a TANF enrollment pattern similar to that of Pinal County as a whole - in almost all zip codes, enrollment gradually decreased over the period.

**Exhibit 31. Families with Children Ages 0-5 Enrolled in TANF by Zip Code, 2007-2012**

Locality	Zip Code	June 2007	Jan. 2009	June 2009	Jan. 2010	July 2010	Jan. 2011	July 2011	Jan. 2012
Apache Junction	85117/217	0	0	0	*	0	0	0	*
	85119/219	35	51	38	23	16	10	13	13
	85120/220	78	65	72	52	28	23	25	22
	85178/278	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D
Arizona City	85123/223	35	36	32	30	23	25	17	10
Casa Grande	85122/222	173	155	157	149	110	97	80	105
	85130/230	*	*	*	*	0	0	*	0
	85193/293	0	*	11	12	12	15	12	*
	85194/294	0	*	*	*	*	*	*	*
Coolidge	85128/228	80	84	70	83	55	47	40	38
Eloy	85131/231	66	70	54	61	44	42	31	31
Florence	85132/232	27	31	43	28	29	14	16	11
Gold Canyon	85118/218	*	*	*	*	*	*	*	*
Hayden	85135	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D
Kearny	85137	N/D	N/D	N/D	N/D	*	0	*	*
Mammoth	85618	11	*	11	14	*	*	*	*
Marana	85658	0	*	*	*	*	*	0	*
City of Maricopa	85138	0	0	0	27	23	22	12	10
	85139/239	49	29	36	46	29	13	*	11
Oracle	85623	10	14	*	*	*	*	*	*
Picacho	85141/241	*	*	*	*	*	*	*	0
Queen Creek	85142/242	56	58	52	55	41	22	29	29
Red Rock	85145/245	0	*	*	*	*	0	0	0
San Manuel	85631	*	10	*	*	*	*	*	*
San Tan Valley	85140/240	0	31	34	35	31	19	19	13
	85143/243	37	50	50	40	35	21	21	22
Stanfield	85172/272	11	*	14	11	10	*	*	*
Superior	85173/273	13	*	11	13	*	*	0	*
Tortilla Flat	85190	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D
Valley Farms	85191/291	*	*	*	*	0	*	0	0
Winkelman	85192/292	*	*	*	*	*	0	0	0

Note. From Arizona Department of Economic Security (DES), 2014. [SNAP-TANF2010, SNAP-TANF 2014]. Unpublished raw data received from First Things First State Agency Data Request. The months for which DES provided data vary by year. No data was provided for 2008. \*Data counts < 10 but > 0 are suppressed to protect confidentiality. N/D indicates no data was provided.



Exhibit 32 shows that the number of children 0-5 years old enrolled in TANF has fluctuated between June 2007 and January 2012; although in most zip codes it has gradually decreased from 2009 to 2012.

**Exhibit 32. Children Ages 0-5 Enrolled in TANF, Pinal Region by Zip Code, 2007-2012**

Locality	Zip Code	June 2007	Jan. 2009	June 2009	Jan. 2010	July 2010	Jan. 2011	July 2011	Jan. 2012
Apache Junction	85117/217	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D
	85119/219	27	26	23	15	*	*	*	*
	85120/220	65	35	39	29	22	10	*	10
	85178/278	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D
Arizona City	85123/223	22	19	27	27	*	17	*	*
Casa Grande	85122/222	143	96	102	120	56	49	38	44
	85130/230	0	0	0	0	0	0	*	0
	85193/293	0	12	14	18	13	19	13	*
	85194/294	0	*	*	*	*	*	*	*
Coolidge	85128/228	73	15	59	61	24	19	16	14
Eloy	85131/231	66	78	78	62	25	19	16	24
Florence	85132/232	25	25	28	17	10	*	*	*
Gold Canyon	85118/218	0	*	*	*	*	*	*	*
Hayden	85135	0	0	0	*	N/D	N/D	N/D	N/D
Kearny	85137	N/D	N/D	N/D	N/D	*	0	0	0
Mammoth	85618	*	*	14	20	*	*	*	0
Marana	85658	0	9	*	*	*	*	0	*
City of Maricopa	85138	0	0	0	17	12	17	*	*
	85139/239	58	29	27	40	15	*	*	*
Oracle	85623	12	*	*	*	0	0	*	*
Picacho	85141/241	*	*	*	*	N/D	N/D	N/D	N/D
Queen Creek	85142/242	53	43	46	47	16	13	15	13
Red Rock	85145/245	0	*	*	*	*	0	0	0
San Manuel	85631	*	*	*	*	0	0	0	*
San Tan Valley	85140/240	0	31	38	23	16	*	*	*
	85143/243	22	22	24	29	15	*	*	11
Stanfield	85172/272	7	13	17	19	*	*	*	0
Superior	85173/273	17	11	*	14	*	*	0	0
Tortilla Flat	85190	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D
Valley Farms	85191/291	*	*	*	0	N/D	N/D	N/D	N/D
Winkelman	85192/292	*	*	*	0	N/D	N/D	N/D	N/D
Region Total	-	641	681	619	628	258	225	193	173
Arizona Total	-	15,262	14,843	16,034	16,070	6,283	4,676	4,621	4,401

Note. From Arizona Department of Economic Security (DES), 2014. [SNAP-TANF2010, SNAP-TANF 2014]. Unpublished raw data received from First Things First State Agency Data Request. The months for which DES provided data vary by year. No data was provided for 2008. \*Data counts < 10 but > 0 are suppressed to protect confidentiality. N/D indicates no data was provided.

The Supplemental Nutrition Assistance Program (SNAP) is another federal program utilized by families in Pinal County. In Arizona the program is known as Nutrition Assistance. According to a 2010 study by the Children’s Hospital of Philadelphia’s Research Institute’s PolicyLab, “poor nutrition resulting from food insecurity has been linked to behavioral problems in preschoolers; lower educational performance among kindergarteners; generally poorer cognitive and psychosocial development among children of various ages; and adverse health outcomes such as more frequent hospitalizations, particularly among young children” (Sell, Zlotnik, Noonan, & Rubin, 2010).

The results of studies by the United States Department of Agriculture (Children’s HealthWatch, 2011a; Nord & Prell, 2011) have both concluded that the 2009 across-the-board increase in SNAP benefits contributed to the health, well-being, and food security of young children during the recent recession. However, a collaborative study by Children’s HealthWatch, Drexel University School of Public Health, and the Center for Hunger-free Communities (Children’s HealthWatch, 2011b) conducted in urban low-income neighborhoods in Philadelphia found that even the increased level of SNAP benefits achieved in 2009 left poor families with children far short of being able to afford a minimal healthy diet and that, in some locations, many of the foods needed for such a diet are not readily available.

Children who received SNAP benefits are less likely to be at risk of anemia, obesity, poor health, developmental delays, and even child abuse or neglect than are children eligible for but not receiving such benefit (Children’s HealthWatch, 2012; Frank, et al., 2013). Families awarded SNAP benefits are also better able to afford essential nonfood expenses like housing, utilities and medical treatment (Shaefer & Gutierrez, 2013). Thus, the 5% cut in SNAP benefits that took effect in November 2013, resulting in a cut in benefits of about \$36 per month for a family of four, may have further impacted the ability of some Pinal families to meet their basic needs (Public News Service, 2014).

Data regarding the number of families with children age zero through five years old who are SNAP recipients provides additional insight into the economic status of Pinal County families with young children (Exhibit 33). The table below shows that SNAP enrollment by Pinal County families with children ages zero to five steadily increased from 5,457 in January 2009 to 7,387 in January 2012, a 35% increase in enrollment over the period. This level of SNAP enrollment increase in Pinal County surpasses the 26% enrollment increase statewide over the same years.

**Exhibit 33. Families with Children Ages 0-5 Enrolled in SNAP**

Locality	Jan. 2009	June 2009	Jan. 2010	July 2010	Jan. 2011	July 2011	Jan. 2012
<b>Pinal County</b>	5,457	6,040	6,449	6,558	6,669	7,149	7,387
<b>Arizona</b>	119,380	133,148	145,657	143,665	138,687	147,871	150,952

*Note.* From Arizona Department of Economic Security (DES), 2014. [SNAP-TANF2010, SNAP-TANF 2014]. Unpublished raw data received from First Things First State Agency Data Request. The months for which DES provided data vary by year. No data was provided for 2008. In Arizona, SNAP is called Nutrition Assistance.

A zip code level breakdown of SNAP participation by families with children ages zero to five sheds further light on geographic variation in participation across the region. Exhibit 34 shows a relatively steady increase in SNAP enrollment for families with young children from 2009 to 2012 in some zip codes (e.g., 85120, 85122, 85128, and 85142); however, several zip codes (85194, 85118, 85658) show a decrease in the last reported month or several months.

**Exhibit 34. Families with Children Ages 0-5 Enrolled in SNAP by Zip Code, 2009-2012**

Locality	Zip Code	Jan. 2009	June 2009	Jan. 2010	July 2010	Jan. 2011	July 2011	Jan. 2012
Apache Junction	85117/217	0	*	*	*	*	*	*
	85119/219	283	307	315	308	312	310	351
	85120/220	476	518	520	517	508	539	554
	85178/278	0	0	0	N/D	N/D	N/D	N/D
Arizona City	85123/223	248	289	295	314	314	336	331
Casa Grande	85122/222	1203	1323	1123	1,461	1,479	1,519	1,551
	85130/230	*	*	*	*	*	*	*
	85193/293	114	127	124	113	119	132	128
	85194/294	74	88	88	104	90	93	88
Coolidge	85128/228	407	428	480	466	476	545	576
Eloy	85131/231	461	470	495	513	489	520	529
Florence	85132/232	201	263	262	280	289	287	290
Gold Canyon	85118/218	86	100	32	60	53	52	48
Hayden	85135	0	0	*	*	*	*	14
Kearny	85137	0	0	*	36	46	33	40
Mammoth	85618	64	68	76	75	61	63	57
Marana	85658	45	37	44	148	151	143	131
City of Maricopa	85138	0	0	322	384	421	460	484
	85139/239	290	337	351	367	331	366	384
Oracle	85623	79	77	75	78	79	71	70
Picacho	85141/241	13	13	12	13	17	17	12
Queen Creek	85142/242	408	486	593	632	587	633	662
Red Rock	85145/245	18	14	15	19	20	21	22
San Manuel	85631	87	100	101	91	80	97	95
San Tan Valley	85140/240	343	398	464	495	539	505	556
	85143/243	394	479	584	633	584	608	634
Stanfield	85172/272	79	87	100	85	76	83	82
Superior	85173/273	82	92	102	97	78	82	92
Tortilla Flat	85190	0	0	0	*	*	0	0
Valley Farms	85191/291	*	*	*	*	*	*	*
Winkleman	85192/292	38	39	45	48	50	58	49

Note. From Arizona Department of Economic Security (DES), 2014. [SNAP-TANF2010, SNAP-TANF 2014]. Unpublished raw data received from First Things First State Agency Data Request. In Arizona, SNAP is called Nutrition Assistance. The months for which DES provided data vary by year. No data was provided for 2008. \*Data counts < 10 but > 0 are suppressed to protect confidentiality. N/D indicates no data was provided.

Exhibit 35 shows the zip code level distribution of children ages zero to five receiving SNAP benefits in the Pinal Region from January 2009 to January 2012. In January 2012, the largest concentrations of young children receiving SNAP benefits over this period were in zip codes 85122/222 (Casa Grande), 85142/242 (Queen Creek), 85143/243 (San Tan Valley 85131/231), and 85128/228 (Coolidge). There were no consistent patterns from January 2009 to January 2012 across all of the region's zip codes in the number of children ages zero to five receiving SNAP benefits, although a number of zip codes showed relatively consistent increases. Few zip codes had a decrease in enrollment in the last few reported months.

As SNAP benefits are based on income eligibility, large increases in the number of recipients suggest that many families in the Pinal Region experienced economic difficulties during the recent economic recession and continued to do so in 2012. However, beyond being a sign of economic stress in the region and consistent with study findings presented above, the increase in SNAP participation among families with 0-5 year olds over the last five years suggests that many young children in the region may be dependent on government programs to fulfill their basic nutritional needs.

**Exhibit 35. Children Ages 0-5 Enrolled in SNAP, Pinal Region by Zip Code, 2009-2012**

Locality	Zip Code	Jan. 2009	June 2009	Jan. 2010	July 2010	Jan. 2011	July 2011	Jan. 2012
Apache Junction	85117/217	0	*	*	*	*	*	*
	85119/219	403	451	455	438	439	444	497
	85120/220	685	735	739	747	728	777	790
	85178/278	0	0	0	0	0	0	0
Arizona City	85123/223	380	446	476	475	475	496	495
Casa Grande	85122/222	1,834	1,994	2,153	2,173	2,177	2,230	2289
	85130/230	*	*	*	*	*	*	*
	85193/293	177	183	188	180	183	207	192
	85194/294	113	138	130	168	136	148	134
Coolidge	85128/228	658	692	754	765	756	842	874
Eloy	85131/231	738	744	768	811	743	776	776
Florence	85132/232	320	419	421	441	449	440	458
Gold Canyon	85118/218	56	72	62	78	69	66	65
Hayden	85135	0	0	*	*	11	11	20
Kearny	85137	0	0	*	55	67	51	57
Mammoth	85618	93	102	116	107	91	94	89
Marana	85658	91	94	89	62	77	75	84
City of Maricopa	85138	0	0	492	570	645	701	749
	85139/239	439	512	537	562	513	569	596
Oracle	85623	119	110	109	112	114	97	100
Picacho	85141/241	21	19	20	19	26	26	15
Queen Creek	85142/242	642	768	908	961	903	953	995
Red Rock	85145/245	22	18	22	29	35	34	36
San Manuel	85631	133	151	146	133	114	140	138

Locality	Zip Code	Jan. 2009	June 2009	Jan. 2010	July 2010	Jan. 2011	July 2011	Jan. 2012
San Tan Valley	85140/240	543	656	743	787	847	799	874
	85143/243	629	728	903	993	891	932	972
Stanfield	85172/272	129	143	153	132	115	120	112
Superior	85173/273	119	130	147	138	119	119	140
Tortilla Flat	85190	0	0	0	*	*	0	0
Valley Farms	85191/291	*	*	*	*	11	*	*
Winkelman	85192/292	58	58	66	71	75	85	66
Region Total	-	8,408	9,244	9,844	10,016	10,081	10,751	11,070
Arizona	-	179,831	199,367	215,837	212,465	204,058	216,398	219,926

Note. From Arizona Department of Economic Security (DES), 2014. [SNAP-TANF2010, SNAP-TANF 2014]. Unpublished raw data received from First Things First State Agency Data Request. In Arizona, SNAP is called Nutrition Assistance. The months for which DES provided data vary by year. No data was provided for 2008. \*Data counts < 10 but > 0 are suppressed to protect confidentiality. N/D indicates no data was provided.

Free or reduced school lunch programs have traditionally been another means by which low-income children receive nutritional supplementation. Families qualify for this program based on their income and family size, as determined by the U.S. Department of Health and Human Services. In 2011, program enrollment in school districts ranged from 43% in J.O. Combs Elementary District to 99% in Picacho and Stanfield Elementary Districts (Exhibit 36). Overall, in 12 of the 14 reported districts, more than half of students were enrolled in free or reduced lunch.

**Exhibit 36. Children Enrolled in Free or Reduced Cost School Lunch Program, 2008-2011**

School District	2008	2009	2010	2011
Apache Junction Unified District	41%	45%	53%	55%
Casa Grande Elementary District	60%	59%	64%	60%
Coolidge Unified District	12%	61%	66%	72%
Eloy Elementary District	88%	89%	90%	84%
Florence Unified School District	48%	48%	51%	51%
J O Combs Elementary District	31%	30%	39%	43%
Mammoth-San Manuel Unified District	71%	67%	75%	70%
Maricopa Unified School District	32%	41%	51%	50%
Mary C O'Brien Accommodation District	N/D	N/D	N/D	N/D
Oracle Elementary District	50%	39%	41%	<1% <sup>+</sup>
Picacho Elementary District	99%	99%	88%	99%
Ray Unified District	56%	47%	53%	57%
Red Rock Elementary District	<1%	21%	<1%	N/D
Stanfield Elementary District	100%	88%	99%	99%
Superior Unified District	60%	84%	86%	77%
Toltec Elementary District	66%	59%	70%	74%
Arizona	38%	47%	47%	45%
United States	41%	44%	46%	48%

Note. From *Federal Education Budget Project*, New America Foundation. Data were obtained from the Common Core of Data at the National Center for Education Statistics. N/D indicates no data was provided. <sup>+</sup>The consultant contacted Oracle Elementary District to verify the large decrease in enrollment in 2011. The district's business agent was not able to locate data to check those presented in this exhibit but doubted that less than 1% of students participated in the program.

Women, Infants and Children (WIC) is a program of the Food and Nutrition Service of the United State Department of Agriculture that provides grants to states primarily for providing supplemental foods to low-income pregnant and postpartum women and their children up to age five who are at nutritional risk.

To qualify for WIC benefits a family's income must fall at or below 185% of the federal poverty line. Some studies of WIC programs suggest that it has positive impacts on family well-being. For example, some researchers have found that prenatal participation in WIC improves birth weight and fetal growth (Gueorguieva, Morse, & Jeffrey, 2008; Bitler & Currie, 2004; Kowaleski-Jones & Duncan, 2000). Given the program's focus on low-income mothers and their young children, WIC participation numbers serve as another useful indicator of regional economic conditions as well as how well the nutritional needs of the region's young children are being met.

Exhibit 37 shows that the number of children (ages 13-59 months) certified to participate in WIC slightly decreased from January 2010 to January 2011 and again from January 2011 to 2012. Participation numbers for the same period follow the same slightly downward trend. Only approximately 21% of the children certified for WIC go on to participate in the program. Given that these children live in economically vulnerable households suggests that increased follow-up efforts with families certified for WIC might lead to better nutritional outcomes for children in the region.

**Exhibit 37. WIC Participation of Children Ages 13-59 Months, January 2010 – January 2012**

Locality	Jan. 2010		Jan. 2011		Jan. 2012	
	Certified	Participated	Certified	Participated	Certified	Participated
<b>Pinal Region</b>	6,599	1,430	6,486	1,349	6,401	1,347
<b>Arizona</b>	113,946	94,236 (83%)	109,104	91,919 (84%)	108,559	90,389 (83%)

*Note.* From Arizona Department of Health Services, 2014. [WIC data set]. Unpublished raw data received from First Things First State Agency Data Request.

Exhibit 38 summarizes WIC participation by zip code in Pinal County. The zip codes with the largest number of children participating in WIC are 85122/222 (Casa Grande), 85142/242 (Queen Creek), and 85140/240 (San Tan Valley). In January 2012, participation rates (i.e., the percentage of certified children that actually participate) in zip codes for which there are reportable data varied in the region, from a low of 22% for 85128/228 (Coolidge) to a high of 94% for 85132/232 (Florence). However, in that month the participation rate for most zip codes was between 77% and 87%. The lower participation rates for some zip codes suggest a need for greater follow-up regarding participation after children are certified.

**Exhibit 38. WIC Participation of Children Ages 13-59 Months, Unduplicated, 2010 – 2012**

Locality	Zip Code	January 2010		January 2011		January 2012	
		Certified	Participated	Certified	Participated	Certified	Participated
Apache Junction	85117/217	*	*	*	*	*	*
	85119/319	297	238 (80%)	255	211 (83%)	253	187 (74%)
	85120/220	462	373 (81%)	429	356 (83%)	419	341 (81%)
	85178/278	*	*	*	*	*	*
Arizona City	85123/223	290	230 (79%)	429	219 (51%)	247	192 (78%)
Casa Grande	85122/222	1,435	1,107 (77%)	1,317	1,062 (81%)	1,266	1,033 (82%)
	85130/230	*	*	*	*	*	*
	85193/293	51	37 (73%)	63	57 (90%)	69	59 (86%)
	85194/294	49	42 (86%)	48	41 (85%)	61	47 (77%)
Coolidge	85128/228	527	418 (79%)	509	427 (84%)	485	106 (22%)
Eloy	85131/231	486	390 (80%)	443	373 (84%)	409	350 (86%)
Florence	85132/232	311	251 (81%)	304	228 (75%)	228	214 (94%)
Gold Canyon	85118/218	*	*	*	*	*	*
Hayden	85135	*	*	*	*	*	*
Kearny	85137/237	*	*	*	*	*	*
Mammoth	85618	59	45 (76%)	60	54 (90%)	48	36 (75%)
Marana	85658	*	*	*	*	*	*
City of Maricopa	85138/238	359	292 (81%)	407	336 (83%)	447	376 (84%)
	85139/239	369	280 (76%)	315	262 (83%)	310	271 (87%)
Oracle	85623	53	49 (92%)	57	46 (81%)	46	31 (67%)
Picacho	85141/241	*	*	*	*	*	*
Queen Creek	85142/242	700	560 (80%)	665	535 (80%)	596	488 (82%)
Red Rock	85145/245	*	*	*	*	*	*
San Manuel	85631	96	80 (83%)	85	80 (94%)	85	68 (80%)
San Tan Valley	85140/240	589	466 (79%)	588	494 (84%)	588	464 (79%)
	85143/243	631	504 (80%)	554	447 (81%)	510	410 (80%)
Stanfield	85172/272	49	45 (92%)	55	46 (84%)	67	58 (87%)
Superior	85173/273	47	*	43	*	*	*
Tortilla Flat	85190	*	*	*	*	*	*
Valley Farms	85191/291	*	*	*	*	*	*
Winkelman	85192/292	*	*	*	*	*	*

Note. From Arizona Department of Health Services, 2014. [WIC data set]. Unpublished raw data received from First Things First State Agency Data Request. \*In accordance with FTF guidelines, data <10 and > 0 are suppressed to ensure confidentiality.

For all reported time points, the number of infants (ages 0-12 months) certified and participating in WIC was lower than the number of children certified and participating in the program.

Although infants are counted as a separate category, when they pass 6 months in age they are counted in the child category. The participation rate of infants fluctuated by zip code and by month within zip codes (Exhibit 39). In January 2012, the participation rate for the majority of zip codes reported was 89% or higher. As with participation rates for children, lower participation rates for some zip codes suggests a need for greater follow-up after infants are certified.



**Exhibit 39. WIC Participation of Infants Ages 0-12 Months, Unduplicated, 2010 – 2012**

Locality	Zip Code	January 2010		January 2011		January 2012	
		Certified	Participated	Certified	Participated	Certified	Participated
Apache Junction	85117/217	*	*	*	*	*	*
	85119/319	137	119 (87%)	99	92 (93%)	101	90 (89%)
	85120/220	214	178 (83%)	179	164 (92%)	153	139 (91%)
	85178/278	*	*	*	*	*	*
Arizona City	85123/223	125	116 (93%)	179	103 (58%)	109	93 (85%)
Casa Grande	85122/222	600	517 (86%)	581	528 (91%)	547	488 (89%)
	85130/230	*	*	*	*	*	*
	85193/293	*	*	34	*	*	*
	85194/294	*	*	*	*	32	30 (94%)
Coolidge	85128/228	193	169 (88%)	185	165 (89%)	205	30 (15%)
Eloy	85131/231	150	139 (93%)	152	139 (91%)	154	152 (99%)
Florence	85132/232	124	77 (62%)	113	93 (82%)	92	83 (90%)
Gold Canyon	85118/218	*	*	*	*	*	*
Hayden	85135	*	*	*	*	*	*
Kearny	85137/237	*	*	*	*	*	*
Mammoth	85618	*	*	*	*	*	*
Marana	85658	*	*	*	*	*	*
City of Maricopa	85138/238	187	165 (88%)	246	206 (84%)	202	181 (90%)
	85139/239	149	126 (85%)	113	107 (95%)	132	116 (88%)
Oracle	85623	*	*	*	*	*	*
Picacho	85141/241	*	*	*	*	*	*
Queen Creek	85142/242	303	276 (91%)	282	254 (90%)	298	230 (77%)
Red Rock	85145/245	*	*	*	*	*	*
San Manuel	85631	42	38 (90%)	*	*	35	33 (94%)
San Tan Valley	85140/240	259	226 (87%)	238	220 (92%)	257	221 (86%)
	85143/243	246	216 (88%)	230	209 (91%)	248	227 (92%)
Stanfield	85172/272	*	*	*	*	32	31 (97%)
Superior	85173/273	*	*	*	*	*	*
Tortilla Flat	85190	*	*	*	*	*	*
Valley Farms	85191/291	*	*	*	*	*	*
Winkelman	85192/292	*	*	*	*	*	*
Region Total	-	2,848	564 (20%)	2,844	551 (19%)	814	544 (67%)
Arizona	-	49,945	44,468 (89%)	47,940	42,952 (90%)	46,898	42,268 (90%)

Note. From Arizona Department of Health Services, 2014. [WIC data set]. Unpublished raw data received from First Things First State Agency Data Request. \*In accordance with FTF guidelines, data <10 and > 0 are suppressed to ensure confidentiality.

The number of Pinal County women certified and participating in WIC fluctuated across zip codes and by month within zip codes (Exhibit 40). In January 2012, the participation rate for the majority of zip codes for which there are reportable data ranged from 81% to 86%. As with participation rates for children and infants, lower participation rates for some zip codes suggests a need for greater follow-up after women are certified.



**Exhibit 40. WIC Participation of Women, Unduplicated, 2010 – 2012**

Locality	Zip Code	Jan. 2010		Jan. 2011		Jan 2012	
		Certified	Participated	Certified	Participated	Certified	Participated
Apache Junction	85117/217	*	*	*	*	*	*
	85119/319	125	109 (87%)	101	87 (86%)	110	94 (85%)
	85120/220	215	184 (86%)	176	154 (88%)	141	119 (84%)
	85178/278	*	*	*	*	*	*
Arizona City	85123/223	123	105 (85%)	176	97 (55%)	117	90 (77%)
Casa Grande	85122/222	562	481 (86%)	582	504 (87%)	529	455 (86%)
	85130/230	*	*	*	*	*	*
	85193/293	*	*	*	*	37	33 (89%)
	85194/294	30	*	*	*	*	*
Coolidge	85128/228	199	169 (85%)	191	141 (74%)	215	33 (89%)
Eloy	85131/231	161	142 (88%)	163	150 (92%)	157	144 (92%)
Florence	85132/232	89	82 (92%)	100	80 (80%)	92	75 (82%)
Gold Canyon	85118/218	*	*	*	*	*	*
Hayden	85135	*	*	*	*	*	*
Kearny	85137/237	*	*	*	*	*	*
Mammoth	85618	*	*	*	*	*	*
Marana	85658	*	*	*	*	*	*
City of Maricopa	85138/238	184	156 (85%)	233	191 (2%)	198	161 (81%)
	85139/239	100	87 (87%)	119	107 (90%)	124	104 (84%)
Oracle	85623	*	*	*	*	*	*
Picacho	85141/241	*	*	*	*	*	*
Queen Creek	85142/242	290	238 (82%)	266	234 (88%)	241	208 (86%)
Red Rock	85145/245	*	*	*	*	*	*
San Manuel	85631	37	33 (89%)	34	33 (97%)	*	*
San Tan Valley	85140/240	237	179 (76%)	233	200 (86%)	247	205 (83%)
	85143/243	241	205 (85%)	226	195 (86%)	217	182 (84%)
Stanfield	85172/272	*	*	*	*	*	*
Superior	85173/273	*	*	*	*	*	*
Tortilla Flat	85190	*	*	*	*	*	*
Valley Farms	85191/291	*	*	*	*	*	*
Winkelman	85192/292	*	*	*	*	*	*
Region Total	-	2,763	531 (19%)	2,800	552 (20%)	2,738	547 (20%)
Arizona Total	-	48,218	40,922 (85%)	47,571	40,819 (86%)	47,546	40,780 (86%)

Note. From Arizona Department of Health Services. (2014). [WIC data set]. Unpublished raw data received from First Things First State Agency Data Request. \*In accordance with FTF guidelines, data <10 and > 0 are suppressed to ensure confidentiality.

The Pinal Regional Partnership Council has also allotted funds to programs to support the food security of families with young children. In SFY 2014, the Regional Council allocated \$100,000 for the distribution of food boxes to families in need. However, over the last three years the Regional Council has been strategically planning to decrease funding in this area, with the current year being the last year of funding. The grantee that has been supplying the food boxes has helped transition families to other community food program such as WIC, FEMA Food Funds, and Pinal Community Food Banks.

## Educational Indicators

Research suggests that the educational attainment of mothers has implications for the educational progress of their youth. Some studies suggest that women with more education are more likely to place their children in child care that promotes school readiness, compared to their less-educated peers. Better educated mothers are also likely to read to their children more often, which improves a child's communication skills, school readiness, vocabulary, and IQ (Carneiro, Meghir & Parey, 2007; Liu, 2010; Magnuson & McGroder, 2002). While it is not clear how critically related maternal education is to overall youth academic attainment, these findings suggest that it is important to consider when assessing the needs and assets of a region.

### Educational Attainment

From 2008 to 2012, the educational level of mothers in Pinal County has varied (Exhibit 41). The percentage of mothers with a high school diploma was 35% in 2012, the highest of the five reported years. However, in 2012 the percentage of mothers with one to four years of college was 47%, lower than the previous four years. Given the importance of a college education in the contemporary job market, it would not be cause for concern if the percentage of mothers with a high school diploma decreased in coming years as long as the percentage with a college education increased commensurately.

**Exhibit 41. Percentage of Live Births by Educational Attainment of Mother**

	Education Level	2008	2009	2010	2011	2012
<b>Pinal County</b>	No High School Diploma	20%	19%	20%	18%	18%
	High School Diploma	32%	31%	31%	33%	35%
	1-4+ yrs. of College	48%	50%	49%	49%	47%
	Unknown	<1%	<1%	<1%	1%	<1%
<b>Arizona</b>	No High School Diploma	26%	24%	22%	20%	15%
	High School Diploma	30%	31%	31%	31%	31%
	1-4+ yrs. of College	43%	45%	47%	48%	49%
	Unknown	<1%	1%	1%	1%	1%
<b>United States</b>	No High School Diploma	18%	17%	17%	16%	15%
	High School Diploma	24%	24%	24%	23%	23%
	1-4+ yrs. of College	49%	48%	48%	50%	51%
	Graduate or Professional Degree	9%	10%	10%	10%	11%

Note. From Table 5B-13 Births by Mother's Education and County of Residence, Arizona 2008-2012; Arizona Birth and Maternal Characteristics 2009-2012, Arizona Department of Health Services, Health Status and Vital Statistics; Women 15 to 50 Years Who Had a Birth in the Past 12 Months by Marital Status and Educational Attainment, 2008-2012 American Community Survey, 1-Year Estimates, United States Census Bureau. S Percentages may not total 100% due to rounding. "No high school diploma" is defined as 0-11 years of education; "High school diploma" is defined as completion of 12 years; and "1-4+ yrs. of college" is defined 13-15 years. N/A indicates data is not available. Percentages for United States do not total 100% due to exemption of individuals who received graduate or professional degrees.

American Community Survey 5-year averages for 2008 to 2012 shown in Exhibit 42 indicate that the educational attainment of adults 25 years of age and older in Pinal County compares somewhat favorably to statewide levels. A higher percentage of adults in Pinal County have graduated high school, completed some college, have some college experience, and have attained an associate's degree compared to the state and nationwide. However, the county lags behind state and national figures for attainment of higher education such as a bachelor's degree or a graduate or professional degree. Exhibit 43 shows education levels for the Ak-Chin Indian Community in the region. The community's educational attainment is lower than that of the county, state, and county as a whole, with a much higher percentage of adults who have completed high school and lower percentages of adults with college degrees.

**Exhibit 42. Educational Attainment, Adults 25 Years and Older, 5-Year Average, 2008-2012**

	<b>Not a High School Graduate</b>	<b>High School Graduate</b>	<b>Some College</b>	<b>Associate's Degree</b>	<b>Bachelor's Degree</b>	<b>Graduate or Professional Degree</b>
<b>Pinal County</b>	16%	29%	28%	9%	12%	6%
<b>Arizona</b>	15%	24%	26%	8%	17%	10%
<b>United States</b>	14%	28%	21%	8%	18%	11%

*Note.* From *Selected Social Characteristics in the United States, American Community Survey 2008-2012 5-Year Estimates*, United States Census Bureau. Percentages are based on population estimates of people over 25 years of age: United States N= 204,336,017; Arizona N=4,149,955; Pinal County N=243,196. High school graduation rate included graduation equivalents. Percentages may not total 100% due to rounding.

**Exhibit 43. Educational Attainment, Adults 25 Years and Older, 5 Year Average, 2008-2012**

	<b>Not a High School Graduate</b>	<b>High School Graduate</b>	<b>Some College</b>	<b>Associates Degree</b>	<b>Bachelor's Degree</b>	<b>Graduate or Professional Degree</b>
<b>Ak-Chin Indian Community</b>	32%	47%	14%	4%	0%	2%

*Note.* From *Selected Social Characteristics in the United States, American Community Survey 2008-2012, 5-Year Estimates*, United States Census Bureau. Percentages are based on an estimated 596 people over 25 years of age.

## Kindergarten Readiness and Literacy

While there is a national focus on assessing students' academic progress and quality of education provided, more attention has been placed on measuring children's school readiness levels. School readiness is defined as "a child's attainment of a certain set of emotional, behavioral, and cognitive skills needed to learn, work, and function successfully in school" (Rafoth, Buchenauer, Crissman & Halko, 2004). Ongoing



research confirms that children's readiness for school is multifaceted, encompassing a range of physical, social, emotional, language, and cognitive skills that children need to thrive (Center for Family Policy & Research, 2008). However, professionals struggle with ways to identify and measure school readiness. A recent study by Belfield and Garcia (2014) found that between 1993 and 2007 there was a large increase in parental belief in the importance of children having skills such as knowing the letters of the alphabet and the ability to count to 20 to be ready for entering school.

Kindergarten readiness is important to consider as research studies have found that participation by low-income children in early intervention programs prior to kindergarten is related to improved school performance in the early years of education, particularly for disadvantaged children (Lee, Brooks-Gunn, Shnur & Liaw, 1990; Ludwig & Phillips, 2007; Magnuson, Ruhm & Waldfogel, 2007; Temple & Reynolds, 2007). Long-term studies suggest that early childhood programs have positive impacts evident in the adolescent and adult years (Campbell, Pungello, Miller-Johnson, Burchinal & Ramey, 2001; Ludwig & Phillips, 2007; Temple & Reynolds, 2007). Scholars have also suggested that early childhood education enhances young children's social developmental outcomes such as peer relationships (Peisner-Feinberg et al., 2000). However, some researchers have found that barriers of trust, language and childrearing beliefs in some racial and ethnic groups lead families to forego child care services in favor of keeping young children home (Duncan & One, 2012).



A number of factors influence a child's school readiness level in the United States, including health, parental engagement, and language proficiency, which is a key predictor of school success. Early literacy skills (i.e., size of vocabulary, letter recognition, and comprehension of letter and sound relationships) at entry to kindergarten are good predictors of a child's reading ability *throughout* their educational career and that children from low-income families may be falling behind. Low-income children are more likely to start school with limited language skills,

health problems, and social and emotional problems that interfere with learning. To improve school readiness and academic success, in 2005 the State Board of Education adopted the Early Learning Standards, which are aligned with academic standards for kindergarten and Head Start. The Early Learning Standards were reviewed and updated in 2012 (Arizona Department of Education, 2013).

Many assessments have been developed to look at children's growth across developmental domains such as language, social-emotional and physical development, and behavior. Currently, such assessments only serve as proxy measures of school readiness. In school settings throughout Arizona, these assessments are often used to screen children for additional educational support needs, such as English Language Learners. Current research has

confirmed the efficacy of using certain assessment methods in linguistically diverse settings, such as in Arizona (Berhenke, Miller, Brown, Seifer & Dickstein, 2011; Downer et al., 2011). Some school districts also use assessments at entry to preschool to determine a baseline of children's development and better tailor programming and instruction. However, other research found that assessment of children's social and executive domain functioning at 54 months was only partially predictive of socio-emotional and achievement outcomes in the fifth grade (Sabol & Pianta, 2012).

Exhibits 44 and 45 show responses from the 2012 Family Community Survey regarding home literacy practices. Most Pinal respondents reported reading stories, telling stories, or singing songs to their children at least one day per week. Almost half (44%) of the respondents reported having 100 or more children's books in their home.

**Exhibit 44. Home Literacy Practices – Reading and Telling Stories, Singing Songs**

During the past week, how many days did...		1 to 5 days	6 or 7 days
You or other family members read stories to your child/children?	Region	42%	51%
	Arizona	45%	51%
You or other family members tell stories or sing songs to your child/children?	Region	41%	52%
	Arizona	45%	51%

Note. From 2012 FCS (Data for vendors) FINAL, First Things First. Percentages do not total to 100% because at the regional statewide levels a small percentage of respondents did not answer the questions.

**Exhibit 45. Home Literacy Practices – Books in the Home**

		10 or fewer	11 to 100	100 or more
How many books – including library and e-books – do you have right now in your home?	Region	6%	34%	60%
	Arizona	9%	43%	48%
How many children's books – including library and e-books – do you have right now in your home?	Region	3%	53%	44%
	Arizona	9%	61%	30%

Note. From 2012 FCS (Data for vendors) FINAL, First Things First. Percentages do not total to 100% because at the regional statewide levels a small percentage of respondents did not answer the questions.

## Standardized Testing

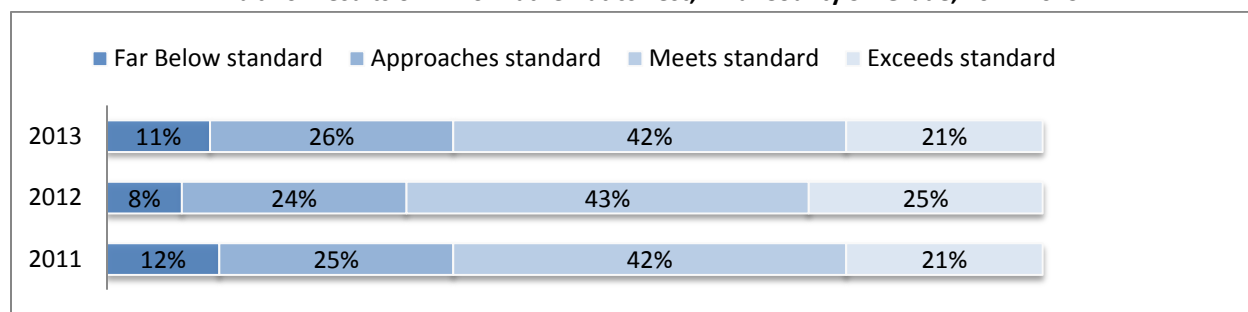
Two instruments that are used frequently across Arizona schools for formative (ongoing and used to guide instruction) assessment are the Dynamic Indicators of Basic Early Literacy Skills (DIBELS) and Arizona's Instrument to Measure Standards (AIMS). These assessments are often used to identify children's early literacy skills upon entry to school and need for interventions in reading throughout the year. Arizona is in the process of implementing new Common Core Standards for K-12 education and in 2014-2015 will replace AIMS with another assessment.

At the kindergarten level, DIBELS tests only a small set of skills around letter knowledge without assessing other areas of children’s language and literacy development such as vocabulary and print awareness. Additionally, DIBELS does not measure other important skill sets around social emotional development, math, or science. While the results of the DIBELS and AIMS assessments do not reflect children’s full range of skills and understanding in the area of language and literacy, they do provide a snapshot of children’s learning as they enter and exit Kindergarten.

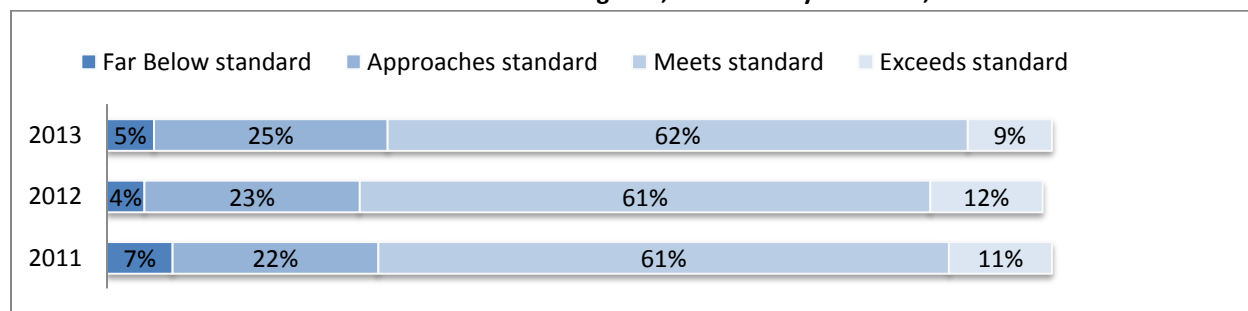
AIMS tests use a four-level scale to measure student performance: the lowest level of performance is termed *Falls Far Below (FFB)*, followed by *Approached (A)*, *Met (M)*, and *Exceeded (E)*. The categories of FFB and A represent failing scores, while M and E represent passing scores.

County-level AIMS results presented in Exhibit 46 show that in 2013, 63% of Pinal County 3<sup>rd</sup> grade students met or exceeded the standard in mathematics, a 5% decrease from 2012. Seventy-one percent of 3<sup>rd</sup> grade students met or exceeded the standard in reading, 2% lower than the previous year (Exhibit 47). While these percentages are relatively high, they conversely show that 37% and 29% of third grade students did not achieve at an acceptable level on mathematics or reading, respectively.

**Exhibit 46. Results of AIMS Mathematics Test, Pinal County 3<sup>rd</sup> Grade, 2011-2013**



**Exhibit 47. Results of AIMS Reading Test, Pinal County 3<sup>rd</sup> Grade, 2011-2013**



Note. Data shown in Exhibits 44 and 45 are from *Aims Assessment Results, 2011-2013*. Arizona Department of Education, Accountability Division, Research and Evaluation.

The varied level of student achievement is more apparent when AIMS results are examined at the school district level. The complete results are dense with numbers and cover multiple pages. Therefore, they are more appropriately presented in an appendix (see Appendix D). However, in summary, from 2011-2013, there was great variation in AIMS mathematics, reading, and



writing scores for third grade students by school district. In six of the 16 school districts, at least 60% of students achieved passing scores on the AIMS mathematics test for the three reported years. No districts had a 70% or higher passing rate for all of the years. For the AIMS reading test, in six of the 13 districts at least 70% of the students achieved a passing score in each of the three years. One district (Mary C. O'Brian Accommodation) had a high percentage (93%, 94%, and 88%) of students that passed the AIMS reading test in each of the reported years.

Looking at changes in scores over time, two districts in the Pinal Region (J.O. Combs Unified and Mary C. O'Brian Accommodation) showed a steady increase in the percentage of students that met or exceeded proficiency standards in math over the 3-year period. Two districts (Oracle Elementary and Stanfield Elementary) showed a steady decrease from 2011 to 2013 in the percentage of students passing the AIMS math test. AIMS reading test scores in the Pinal school districts fluctuated between 2011 and 2013. Only in two districts (Oracle Elementary and Toltec Elementary) was there a steady increase in the percentage of students that passed the test.

## Special Needs Populations

Two of the largest groups of students with special educational needs are English Language Learners (ELL) and those with an Individualized Education Program (IEP). Schools are required to develop an IEP for students with disabilities who meet government requirements under the Individuals with Disabilities Education Act. Exhibit 48 shows a school district-level breakdown of special needs populations (special education, ELL, and students from homeless and migrant families) for the years of 2010 to 2013. In most districts there was no discernible relationship between overall student enrollment and the number of special education students. That is, the number of special education students neither increased nor decreased with fluctuations in student populations. However, for the county as a whole, both the number of special education and ELL students slightly decreased in 2012 and 2013.

In 2013, a total of 3,569 preschool and elementary students in Pinal Region's public school districts were enrolled in special education and, of those students, 1,175 (33%) were ELL. Districts with the largest number of special education students in 2013 were Casa Grande Elementary District (752), Florence Unified District (608), and Maricopa Unified District (500). In the same year, Casa Grande Elementary District had the largest number of ELL students (368), followed by Florence Unified and Maricopa Unified with 153 and 136 ELL students, respectively. In several districts (Casa Grande Elementary, Florence Unified, Maricopa Unified, Picacho Elementary, and Red Rock Elementary), the number of special education students has decreased since 2011. Furthermore, the number of ELL students has decreased in five districts since 2011, including Casa Grande Elementary District, Coolidge Unified District, Eloy Elementary District, Florence Unified School District, and Superior School District. The decrease in ELL students from 2011 to 2013 in two of these districts was quite large – 74% in Coolidge and 53% in Eloy.

**Exhibit 48. Special Needs Students by Public School District, 2010-2013**

School District	Year	Student Total	Homeless	Migrant	Special Education	English Language Learners (ELL)
<b>Apache Junction Unified District (85218/85219/85220)</b>	2010	2,944	38	0	414	143
	2011	2,668	*	0	411	102
	2012	2,601	43	0	424	110
	2013	2,563	51	0	433	94
<b>Casa Grande Elementary District(85222)</b>	2010	6,317	69	*	822	238
	2011	5,973	98	0	830	442
	2012	5,773	94	0	814	388
	2013	5,679	118	0	752	368
<b>Coolidge Unified District (85128/85142/85228/85242)</b>	2010	2,361	*	0	281	43
	2011	2,183	33	0	252	182
	2012	1,960	28	*	249	116
	2013	1,919	38	0	252	47
<b>Eloy Elementary District (85231)</b>	2010	916	0	0	90	102
	2011	858	*	*	91	140
	2012	833	0	0	87	112
	2013	769	0	0	91	66
<b>Florence Unified School District (85132/85232/85242/85243)</b>	2010	4,865	29	0	676	258
	2011	4,729	30	0	683	165
	2012	4,583	*	*	651	159
	2013	4,381	*	0	608	153
<b>J O Combs Unified School District (85140/85240)</b>	2010	2,932	49	0	396	75
	2011	2,755	54	*	447	68
	2012	2,728	50	*	406	107
	2013	2,782	*	*	417	77
<b>Mammoth-San Manuel Unified District (85613)</b>	2010	663	0	0	71	*
	2011	560	0	0	78	*
	2012	509	0	0	84	*
	2013	527	0	0	95	*
<b>Maricopa Unified School District (85239)</b>	2010	3,989	48	0	566	216
	2011	3,576	42	0	541	187
	2012	3,401	74	0	502	189
	2013	3,343	27	0	500	136
<b>Mary C O'Brien Accommodation District (85222)</b>	2010	121	0	0	*	*
	2011	129	0	0	*	*
	2012	126	0	0	*	*
	2013	119	0	0	*	*
<b>Oracle Elementary District (85623)</b>	2010	444	0	0	71	*
	2011	443	0	0	67	*
	2012	381	*	0	68	*
	2013	396	0	0	86	*



School District	Year	Student Total	Homeless	Migrant	Special Education	English Language Learners (ELL)
<b>Picacho Elementary District (85241)</b>	2010	158	0	0	*	*
	2011	186	0	0	39	*
	2012	156	0	0	29	*
	2013	158	0	0	*	*
<b>Pinal County Special Education Program (85222)</b>	2010	*	0	0	*	0
	2011	N/D	N/D	N/D	N/D	N/D
	2012	N/D	N/D	N/D	N/D	N/D
	2013	N/D	N/D	N/D	N/D	N/D
<b>Ray Unified District (85137/85237)</b>	2010	299	0	0	37	*
	2011	297	0	0	30	0
	2012	288	0	0	29	0
	2013	291	0	0	29	0
<b>Red Rock Elementary District (85245)</b>	2010	264	0	0	67	0
	2011	279	0	0	85	*
	2012	274	0	0	81	0
	2013	243	0	0	62	*
<b>Stanfield Elementary District (85272)</b>	2010	572	78	0	44	139
	2011	539	60	0	65	132
	2012	504	57	28	77	104
	2013	475	43	30	63	109
<b>Superior Unified School District (85273)</b>	2010	259	0	0	*	*
	2011	253	0	0	27	*
	2012	265	*	0	28	*
	2013	263	*	0	*	*
<b>Toltec Elementary District (85321)</b>	2010	1,132	0	0	133	70
	2011	1,048	*	0	124	84
	2012	955	*	0	113	69
	2013	921	*	0	128	69
<b>Public School Total</b>	2010	28,236	311	0	3,721	1,334
	2011	26,476	341	0	3,783	1,538
	2012	25,337	368	28	3,659	1,399
	2013	24,829	335	41	3,569	1,175

Note. From Arizona Department of Education. (2014). ADE data Revised Pull 01-31-14]. Unpublished raw data received from First Things First Agency Data Request. \*In accordance with FTF guidelines, data <10 and > 0 are suppressed to ensure confidentiality. N/D indicates that no data was available.

Exhibit 49 also presents data about the number of special needs populations for the years 2010 to 2013, but for Pinal County charter schools. It is important to include data from charter schools as their student population makes up about 8% of the county's total. In most of the charters the number of special education students fluctuated over the four reported years. Only Excalibur Charter Schools and Legacy Traditional Charter School served homeless students. In 2013, 285 students in Pinal Region's charter schools were enrolled in special education and, of those students, of whom 34 were ELL. Eduprize Schools, LLC had the largest number of special

education students, with 116 such students in 2013, followed by Legacy Traditional Charter School with 64. Legacy also had the largest number of ELL students of all the charters (18), followed by Excalibur Charter Schools with 16 ELL students.

**Exhibit 49. Number of Special Needs Students, Charter Schools, 2010-2013**

School District	Year	Student Total	Homeless	Migrant	Special Education	English Language Learners (ELL)
Academy Of Excellence, Inc. (85228)	2010	39	0	0	*	0
	2011	35	0	0	0	0
	2012	*	0	0	*	0
	2013	*	0	0	0	0
Eduprize Schools, LLC (85242)	2010	1,513	0	0	109	0
	2011	1,708	0	0	122	0
	2012	1,625	0	0	120	0
	2013	1,642	0	0	116	0
Excalibur Charter Schools, Inc. (85120/85220)	2010	235	*	0	*	13
	2011	234	*	0	*	0
	2012	257	*	0	*	*
	2013	266	0	0	25	16
Graymark Schools Corporation (85138)	2012	42	0	0	*	0
	2013	71	0	0	*	0
Leading Edge Academy, City of Maricopa (85234/85238)	2010	N/D	N/D	N/D	N/D	N/D
	2011	91	0	0	*	0
	2012	190	0	0	*	0
	2013	220	0	0	29	*
Legacy Traditional Charter School (85138/85286)	2010	543	0	0	39	0
	2011	848	0	0	76	*
	2012	909	*	0	72	10
	2013	969	0	0	64	18
Sierra Oaks School, Inc. (85623)	2010	53	0	0	*	0
	2011	47	0	0	*	0
	2012	50	0	0	*	0
	2013	29	0	0	*	0
The Charter Foundation, Inc. (85019)	2012	202	0	0	*	0
Charter School Total	2010	2,677	*	0	223	13
	2011	3,313	*	0	276	0
	2012	3,686	41	0	294	14
	2013	3,604	0	0	285	34

Note. From Arizona Department of Education, 2014. [ADE data Revised Pull 01-31-14]. Unpublished raw data received from First Things First Agency Data Request. \*In accordance with FTF guidelines, data <10 and > 0 are suppressed to ensure confidentiality. N/D indicates that no data was available.

The number of Head Start special needs and specific needs students varied by year and across location (Exhibit 50). Two school districts, Florence Unified and Maricopa Unified, had 49 or more special needs students in at least three of the years reported. There does not appear to be a relationship between the number of special needs students and the number of needs addressed.

**Exhibit 50. Head Start Special Needs by School Districts and Charter Schools, 2009-2013**

School District or Charter	Year	Student Count	Special Need
<b>Coolidge Unified District (85128/85142)</b>	2009	*	Moderate Intellectual Disability, Specific Learning Disability, Speech/Language Impairment, Severe Intellectual Disability
	2010	*	Mild Intellectual Disability, Speech/Language Impairment
	2011	*	Developmental Delay, Mild Intellectual Disability, Speech/Language Impairment
	2012	*	Orthopedic Impairment, Speech/Language Disability
	2013	*	Developmental Delay/ Speech/Language Impairment
<b>Excalibur Charter Schools, Inc. (81173)</b>	2011	*	Speech/Language Impairment
	2012	*	Speech/Language Impairment
<b>Florence Unified School District (88400/89587/ 89909)</b>	2009	*	Mild Intellectual Disability, Specific Learning Disability, Speech/Language Impairment
	2010	49	Developmental Delay, Mild Intellectual Disability, Orthopedic Impairment, Pre School – Severe Delay, Specific Learning Disability, Speech/Language Impairment
	2011	71	Developmental Delay, Emotional Disability, Hearing Impairment, Mild Intellectual Disability, Moderate Intellectual Disabilities, Multiple Disabilities – Severe Sensory Impairment Orthopedic Impairment, Pre School – Severe Delay, Specific Learning Disability, Speech/ Language Impairment,
	2012	63	Autism, Deaf and Blind, Developmental Delay, Hearing Impairment, Moderate Intellectual Disability, Orthopedic Impairment, Other Health Impairment, Pre School – Severe Delay, Speech Language Impairment
	2013	*	Autism, Developmental Delay, Multiple Disabilities – Severe Sensory Impairment, Mild Intellectual Disability, Moderate Intellectual Disability, Orthopedic Impairment, Speech Language Impairment
<b>Maricopa Unified School District (85239)</b>	2009	25	Autism, Emotional Disability, Other Health Impairment, Pre School Moderate Delay, Pre School – Severe Delay, Pre School – Speech/Language Impairment
	2010	37	Autism, Developmental Delay, Pre School –Severe Delay, Speech/Language Impairment
	2011	56	Autism, Developmental Delay, Pre School – Severe Delay, Speech Language Impairment
	2012	126	Developmental Delay, Other Health Impairment, Speech/Language Impairment, Visual Impairment,
	2013	71	Developmental Delay, Mild Intellectual Disability, Other Health Impairment, Pre School – Severe Delay, Speech/Language Impairment
<b>Mary C O’Brian Accommodation District (85194/85222)</b>	2012	*	Speech/Language Impairment
	2013	*	Speech/Language Impairment

Note. From Arizona Department of Education, 2013. [ADE data Revised Pull 01-31-14]. Unpublished raw data received from First Things First State Agency Data Request. \*In accordance with FTF guidelines, data <10 and > 0 are suppressed to ensure confidentiality. N/D indicates that no data was available.

## Other Relevant Data

The completion of high school is a very important accomplishment in a young person's life. Students who stay in school and challenge themselves academically tend to continue their education, stay out of jail, and earn significantly higher wages later in life (Messacar & Oreopoulos, 2012). Research suggests that students who do not graduate have higher rates of unemployment and underemployment (United State Department of Labor, 2003). U.S. Census Bureau (2012) data shows that the average income for people 18 years of age and older that have not graduated high school is approximately 34% lower than high school graduates and 64% lower than those with Bachelor's degree. The Alliance for Excellent Education (2011) has examined the benefits to society if half of Arizona's 24,700 dropouts in 2010 had stayed in school. The Alliance estimated there would be an increase of \$91 million in earnings, \$212 million in home sales, and \$7 million in tax revenue. However, the Alliance proposes that a high school education is insufficient for ensuring good career opportunities in today's highly competitive job market; if 60% of these youth completed high school and went on to complete a vocational certification, 2-year degree, or 4-year degree, the benefits accruing to individuals and society would increase even more.

Given the importance of graduation, the high school graduation rate should be considered when looking at local needs and assets. High school completion rates allow for a retrospective look at all aspects of early childhood development, ranging from child care and health care services to the education system overall. Students who have the support, resources, and care they need to be able to develop and eventually complete high school are more likely to have positive life outcomes.

The high school graduation rates for the Pinal Region vary widely between and within school districts over time (Exhibit 51). The data for 2008 to 2012 show no discernible trend. In 2012, district graduation rates ranged from 30% for Mary C O'Brien Accommodation District to 97% for Superior Unified School District, with six of the nine districts ranging from 72% to 79%.

**Exhibit 51. High School Graduation Rates, 2008-2012**

	2008	2009	2010	2011	2012
<b>Apache Junction Unified District</b>	64%	67%	75%	76%	78%
<b>Casa Grande Union High School District</b>	75%	72%	91%	79%	76%
<b>Coolidge Unified District</b>	50%	67%	57%	72%	72%
<b>Florence Unified School District</b>	59%	65%	67%	74%	79%
<b>Mammoth-San Manuel Unified District</b>	76%	82%	82%	82%	79%
<b>Mary C O'Brien Accommodation District</b>	23%	33%	28%	33%	30%
<b>Maricopa Unified School District</b>	77%	75%	73%	76%	76%
<b>Santa Cruz Valley Union High School District</b>	61%	62%	65%	48%	67%
<b>Superior Unified School District</b>	75%	80%	85%	88%	97%

Note. From 2012 Four Year Graduation Rate by School and Subgroup; 2011 Four Year Graduation Rate by School and Subgroup; 2010 Four Year Grad Rate by School, Subgroup and Ethnicity; 2009 Four Year Grad Rate by District, School and Subgroup; 2008 Four Year Grad Rate by District, School and Subgroup, Arizona Department of Education, Accountability Division, Research & Evaluation.

# The Early Childhood System

## Early Care Education

There is a need for child care across the United States as a majority of children ages birth to six years of age participate in regular, non-parent child care. In 2007, more than half of children age's three to six who had not entered Kindergarten attended a child care center. For families with mothers who are employed, the need for child care is even higher.

According to the Federal Interagency Forum on Child and Family Statistics (2011), in 2010 during the time mothers were at work 48% of children ages zero to four were principally cared for by a relative, 24% attend a child care center (day care, Head Start, etc.), and 14% receive home-based care by a non-relative. It also found that families use many criteria to make decisions about care for their children. Some of the factors that are often important to parents include: cost; proximity to home or work; and recommendations from friends, family or acquaintances. Parents may also personally assess the center or home's environment, interaction between children and staff, and perceived quality of learning environment. Researchers have also suggested that mothers' assessment of quality are highly personalized, and that choosing high quality care may have a positive effect on a mother's level of depressive symptoms (Gordon et al., 2011).



A nationwide study by the National Association of Child Care Resources and Referral Agencies (NACCRRA) found that the cost of child care was one of parents' highest concerns and noted that parents frequently had to compromise on quality to be able to pay for care (Mohan, Reef & Sarkar, 2006). A 2011 NACCRRA report "revisiting" the cost of child care found that the 2010 average cost for center-based care for a four-year old in the State of Arizona was 40% of the income of a family living at the federal poverty level and 20% of the income of a family living at 200% of the federal poverty level. For families headed by single mothers in Arizona, the cost for infant child care was 35% of median income, 28% of median income for a four year old, and 62% of median income for two children in care (NACCRRA, 2011). It is clear that choosing child care is not a simple decision for many families and may or may not result in the placement of a child in the most ideal child care setting.

## Quality and Access

Early care and education programs are crucial to a thriving economy, not only because they allow parents to work, but because the child care sector is large and purchases numerous goods and services. New economic development strategies toward enhancing child care access can improve child care financing and the business infrastructure associated with the child care sector. Additionally, a significant investment in children's well-being in the early years has enormous long-term payoffs.

According to the Institute for Women's Policy Research (2010), students that are parents make up 27% of community college students and many have young children; 16% of community college students are single parents. The institute noted, however, that available child care only meets a tiny fraction of the need – many campus child care centers have long waiting lists, less than half provide care for infants, and only a small percentage offer evening or weekend services. Improving child care access is not only about improving access to sources of care and education outside the home, but also increasing a parent's capacity to care for their own children.

Research into parents' perceptions of quality in child care has identified a number of factors that parents view as indicating high quality. These indicators of high quality include: a warm and caring environment; staff that is educated, friendly, nurturing, knowledgeable, speaks their child's language, communicates with parents daily, and helps children get along with each other; presence of many books; diverse enrollment; tracking of children's learning and development; and use of a curriculum in child development (Forry et al., 2011; National Association of Child Care Resource and Referral Agencies, 2006). A recent study observed differences in quality ratings between mothers and independent observers (Gordon, Usdansky, Wang, & Gluzman, 2011).



In Arizona, increased efforts have been undertaken to improve child care quality. The Board of First Things First approved funding in March 2008 for the development and implementation of a statewide quality improvement and rating system called Quality First. Effective in 2010, Quality First set the standards of quality child care centers in Arizona. This program identifies measures of quality child care and classifies a list of providers that provide this level of service.

First Things First provides child care providers enrolled in Quality First with an initial program assessment, training and mentoring, and financial incentives that may be used for purchasing educational materials or equipment. This system has become a statewide asset that regions can utilize when addressing child care program quality.

Child care providers that choose to participate in the program are given a rating of between one and five stars, with a rating of three to five stars indicating quality standards are met or exceeded. Exhibit 52 shows that a total of 1,762 children are enrolled with Quality First providers, 1,758 with providers that have a star rating. That the Quality First system is just taking root in the region is evidenced by the fact that most children are enrolled with providers that have 1-2 star ratings, which indicates the providers have not yet met all required quality standards (a 3-star rating). Moreover, 1,197 (68%) of the 1,762 children enrolled with providers with a star rating are in the 3-5 years age range. Further information is required to determine if this is due to lack of demand for or availability of slots for children ages 0-2.



**Exhibit 52. Quality First Child Care Provider Enrollment and Public Star Rating, 2014**

Regional Partnership Council	1-2 Star Rating			3-5 Star Rating			Total Enrollment†
	0-2 Yrs.	3-5 Yrs.	Special Needs	0-2 Yrs.	3-5 Yrs.	Special Needs	
<b>Pinal</b>	349	1,112	160	27	85	25*	1,762
<b>Arizona</b>	12,628*	20,866*	1,976*	2,101*	8,040	1,730*	50,066

*Note. From QF Enrollment Data – FTF Publicly Rated 3-5 and 1-2 Star Rated Programs and Total Enrollment Information provided by FTF. Data collected on June 20, 2014. \*Some counts for special needs children and age groups in some counties are estimated rather than actual. †Total Enrollment numbers include children enrolled in child care centers that are participating in Quality First but do not yet have a star rating. However, the total enrollment numbers do not include children with special needs.*

The Pinal Region has fully embraced the goal of improving access to quality early care and education programs. In SFY 2014, the Regional Partnership Council allotted \$693,765 for Quality First support, of which the largest proportion (\$625,871) went to Quality First coaching and incentives for providers. Allotments also included funding for the Quality First Academy, Quality First Warmline Triage, Quality First Inclusion Warmline, and the Quality First Child Care Health Consultation Warmline.

Quality First capacity in 2014 was expanded to include 36 centers and 11 homes. This increase allowed the Regional Council to attempt to add five underserved locations in the region: Stanfield, Eloy, Toltec, Arizona City, and Picacho. However, outreach in these areas elicited only one response, leaving four slots open at the current time. The Pinal Regional Partnership Council has also adopted the provision of Quality First Scholarships as one of its strategies. In SFY 2014, the region allocated \$2,701,242 for Quality First Scholarships for families, serving 416 families. The Regional Partnership Council plans to provide 392 scholarships in 2015.

The Pinal Regional Partnership Council's commitment to the Quality First initiative is further demonstrated by one of the First Things First School Readiness Indicators it has chosen to focus on: the number and percentage of children with special needs/rights enrolled in an inclusive early care and education program with a Quality First rating of 3-5 stars. Additional SFY 2014 funding (\$440,000) related to improving the quality of early care and education provided training and financial resources to family, friend, and neighbor caregivers in the region. Exhibit 53 shows a list of Quality First providers in the Pinal Region.

**Exhibit 53. Quality First Child Care Centers in the Pinal Region by Community**

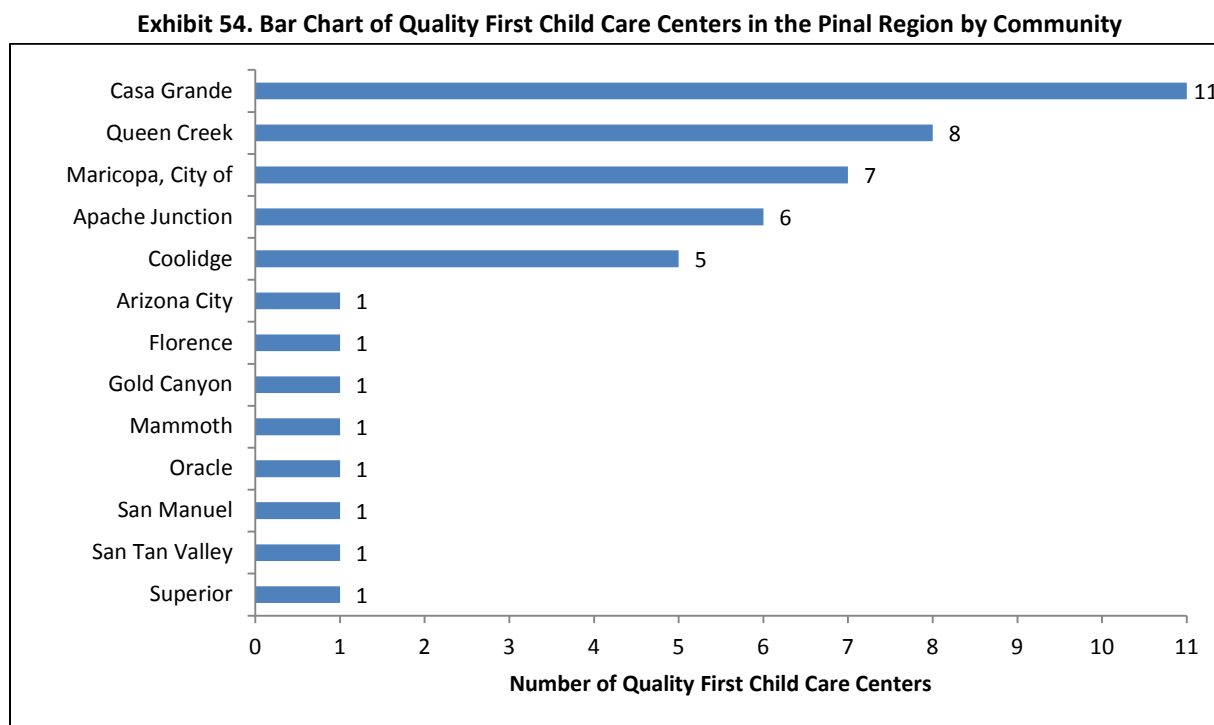
Locality	Zip Code	Quality First Child Care Centers
<b>Apache Junction</b>	85120/85220	Bridges Early Childhood Education
		Bright Futures at Four Peaks
		The Little Prospector
		Sunrise Preschool
		Tots Unlimited – Signal Butte
		Young Parents Program
<b>Arizona City</b>	85223	Mini Leaders LLC

Locality	Zip Code	Quality First Child Care Centers
Casa Grande	85122/85222	Bright Beginnings
		Early Childhood Extension Program
		Just 4 Us Toddler Center
		Nanny's Daycare Preschool
		TLC Preschool
		Ready Set Grow LLC
		Precious Ones Daycare Center
		Spartan Sparkies Preschool
		St. Anthony's Catholic School
		Home of Hope Christian Childcare Center
		Kidz Kare
Coolidge	85128/85228	ABC & 123 Small Blessings Childcare Center
		Blackwater Community School-Preschool
		Kids Klub
		Little Dipper Enrichment Center
		Home Away From Home
Florence	85132/85232	Wonderland Playhouse Childcare Center
Gold Canyon	85118/85218	Kiddy Korner Childcare and Preschool
Queen Creek	85142/85242	Kristina Schofield
		Shining Stars Learning Center
		Our Lady of Guadalupe Academy
		Small Wonders, LLC
		Sue Sossaman Early Childhood Development Center
		Bridges Preschool
		Queen Creek TOY BOX
		Tutor Time Child Care
City of Maricopa	85138/238 85139/239	Maria Irma Galvan
		Geraldine Smith Allen
		Children's Learning Adventure Childcare Center
		Legacy Montessori Inc.
		Y-Kidz-Copper Basin Family YMCA
		Estella Espinoza
		San Tan Valley Head Start
Mammoth	85618	Mammoth Head Start Elementary Pre-K
Oracle	85623	Oracle Ridge Early Childhood Center
Superior	85173/273	J.F. Kennedy Elementary Preschool

Note. From Quality First. Online provider search. First Things First.



The graphic representation of the number of Quality First providers shown in Exhibit 54 demonstrates that providers are geographically concentrated in five communities, with Casa Grande and Queen Creek accounting for 42% of Quality First providers.



Note. From Quality First. Online provider search. First Things First.

In addition to participating in Quality First, child care centers may seek accreditation from one or more national organization. Exhibit 55 shows that there was only one nationally accredited early care and education center in the Pinal Region as of March 31, 2014: the TLC Preschool at Trinity, located in Casa Grande. It is worth noting that the Cavalry Christian School, which is accredited by the Association of Christian Schools International, is located close to the Pinal County border in the Maricopa County portion of Queen Creek.

**Exhibit 55. Accredited Early Care and Education Centers in Pinal County**

	AMI/AMS	ACSI	NAC	NAEYC	NECPA	NAFCC	NLSA
<b>2014</b>	0	1	0	0	0	0	1

Note: From accreditation lists on the websites of: the Association of Christian Schools International (ACSI); Association Montessori Internationale [AMI]; American Montessori Society (AMS); National Accreditation Commission for Early Care and Education Programs (NAC); National Association for the Education of Young Children (NAEYC); National Early Childhood Program Accreditation (NECPA); National Association for Family Child Care (NAFCC); and National Lutheran Accreditation (NLSA).

Licensing by Arizona Department of Health Services' (ADHS) Division of Licensing indicates a child care provider is in conformance with state regulations for such facilities. By mid- 2013 there were a total of 94 licensed child care providers in the Pinal Region (Exhibit 56). Of the 94 licensed providers, 57 were child care centers, with a capacity to serve 4,218 children. Twenty-five licensed facilities were located in public schools, with a total capacity of 1,595 children. Twelve licensed facilities were small group homes, with a capacity of 115 children. The region's licensed centers had a combined capacity to serve 5,928 children, an increase of 526 slots from the 5,402 reported for 2011. The community with the highest percentage of capacity (24%) was Queen Creek, followed by Casa Grande (20%), Maricopa (18%), and Apache Junction (13%).

**Exhibit 56. ADHS Licensed Child Care Facilities by Community, 2013**

	Child Care Centers		Child Care in Public Schools		Small Group Homes	
Community	Number of Centers	Capacity	Number of Centers	Capacity	Number of Centers	Capacity
Apache Junction	7	721	2	74	0	0
Arizona City	4	236	0	0	0	0
Casa Grande	12	961	2	225	1	5
Coolidge	6	257	0	0	2	20
Eloy	4	189	1	25	0	0
Florence	4	205	0	0	1	10
Gold Canyon	1	62	0	0	0	0
Kearny	0	0	1	59	0	0
Mammoth	1	32	0	0	0	0
City of Maricopa	5	644	4	417	1	10
Oracle	0	0	0	0	0	0
Queen Creek	8	723	11	647	7	70
San Manuel	1	43	0	0	0	0
San Tan Valley	2	63	3	138	0	0
Stanfield	1	42	1	10	0	0
Superior	1	40	0	0	0	0
<b>Region Total</b>	<b>57</b>	<b>4,218</b>	<b>25</b>	<b>1,595</b>	<b>12</b>	<b>115</b>

Note. From Child Care Providers (2014). , Arizona Department of Health Services, Provider and Faculty Databases, Division of Licensing Services.

Exhibit 57 shows the change in capacity in Arizona Department of Health Services' (DHS) licensed child care facilities in 2011 and 2013, by community. Capacity increased in four communities: Apache Junction (+6%), Arizona City (+100%), Florence (+65%), and Queen Creek (+642%). However, capacity decreased in nine communities: Casa Grande (-7%), Coolidge (-39%), Eloy (-8%), Mammoth (-60%), City of Maricopa (-28%), Oracle (-100%), San Manuel (-66%), San Tan Valley (-23%), and Superior (-52%). Overall, in Pinal County there was a 10% increase in capacity from 2011 to 2013.

**Exhibit 57. Capacity of Licensed Child Care Facilities, 2011 & 2013**

	Child Care Centers		Child Care in Public Schools		Small Group Homes		
Community	2011 Capacity	2013 Capacity	2011 Capacity	2013 Capacity	2011 Capacity	2013 Capacity	Change in Total Capacity 2011 to 2013
Apache Junction	651	721	99	74	0	0	+6%
Arizona City	118	236	0	0	0	0	+100%
Casa Grande	1021	961	225	225	30	5	-7%
Coolidge	399	257	25	0	30	20	-39%
Eloy	189	189	0	25	10	0	-8%
Florence	120	205	0	0	10	10	+65%
Gold Canyon	62	62	0	0	0	0	0%
Kearny	0	0	59	59	0	0	0%
Mammoth	32	32	49	0	0	0	-60%
Maricopa, City of	644	644	843	417	0	10	-28%
Oracle	0	0	59	0	10	0	-100%
Queen Creek	0	723	184	647	10	70	+642%
San Manuel	43	43	84	0	0	0	-66%
San Tan Valley	122	63	138	138	0	0	-23%
Stanfield	42	42	10	10	0	0	0%
Superior	40	40	44	0	0	0	-52%
Region Total	3,483	4,218	1,819	1,595	100	115	+10%

*Note. From Child Care Providers (2014). , Arizona Department of Health Services, Provider and Faculty Databases, Division of Licensing Services.*

The State of Arizona has designated six districts for the purpose of conducting a child care market rate survey that is required by the United States Department of Health and Human Services. Pinal County and Gila County are in District V. The data presented in Exhibit 58 show that in 2012, the median rate charged by full-time, Department of Economic Security (DES) approved child care centers in District V ranged from \$30 per day for school age children to \$40 per day for children under one year of age. For all age groups except school age children, the District V median rates were slightly below those of the state as a whole.

**Exhibit 58. Daily Rates Charged by Home-based Centers for Full-time Child Care, 2012**

	Children Under 1		1 & 2 Year Olds		3, 4 & 5 Year Olds		School Age	
	Dist. V	State	Dist. V	State	Dist. V	State	Dist. V	State
<b>Median</b>	\$40.00	\$41.00	\$36.80	\$36.98	\$30.00	\$32.00	\$30.00	\$29.07
<b>75%<sup>¥</sup></b>	\$56.66	\$48.80	\$55.00	\$46.95	\$40.00	\$40.00	\$45.00	\$35.00

*Note.* From *Child Care Market Rate Survey 2012*, Arizona Department of Economic Security, Division of Employment and Rehabilitation Services, Child Care Administration. Full time care is considered six or more hours. Rates for children under 1 were based on data from 19 centers. Rates for 1 and 2 year olds were based on data from 26 centers. Rates for 3, 4, and 5 year olds were based on data from 29 centers. Rates for school age children were based on data from 15 centers. Rates were computed based on the average number of children receiving child care. Weekly rates were computed by the number of days care was provided; hourly rates were multiplied by 8. "State" indicates the statewide average. <sup>¥</sup>75% indicates the rate at which 75% of the market is at or below.

The Child Care Administration Office of the Arizona DES assists eligible families with child care costs. Eligibility is in part income-based. Immediate assistance is available if the child is in the Child Protective Services (CPS) system; the family is receiving Cash Assistance (TANF); the family is eligible for transitional child care; or a parent participates in the Arizona DES Jobs Program. In other cases, families are placed on a waiting list.

Exhibit 59 shows that the number of families eligible for child care assistance decreased by 10%, from 660 in January 2011 to 592 in July 2012. However, the number of families receiving assistance fluctuated in a narrow range (549 to 557) over the same period. The number of children eligible for child care assistance also decreased by 10%, from 1,014 in January 2011 to 914 in July 2012, but the number of children receiving assistance showed a 3% increase over the period.

**Exhibit 59. Families and Children Eligible and Receiving Child Care Assistance**

			January 2011	July 2011	January 2012	July 2012
<b>Pinal County</b>	<b>Families</b>	Eligible	660	618	627	592
		Receiving	554	549	557	556
	<b>Children</b>	Eligible	1,014	931	964	914
		Receiving	831	841	863	852
<b>Arizona Total</b>	<b>Families</b>	Eligible	14,708	13,998	13,363	13,187
		Receiving	11,924	12,656	11,854	11,854
	<b>Children</b>	Eligible	21,510	20,664	19,665	19,567
		Receiving	17,596	18,669	17,466	17,466

*Note.* From Arizona Department of Economic Security, 2014. [RNA DES DATA FILE 2014]. Unpublished raw data received from First Things First State Agency Data Request.

Exhibit 60 shows the number of children eligible and receiving child care assistance by zip code. In a majority of zip codes, the number of children receiving child care assistance fluctuated across time. However, in a few zip codes (85123, 85128, 85138) the number of children receiving such assistance increased steadily from June 2011 to June 2012; in others (85194, 85118), the number steadily decreased over the period.

**Exhibit 60. Children Eligible and Receiving Child Care Assistance by Zip Code**

		June 2011		January 2012		June 2012	
	Zip code	Eligible Children	Children Receiving	Eligible Children	Children Receiving	Eligible Children	Children Receiving
Apache Junction	85117/217	*	*	*	*	*	*
	85119/219	*	46	54	48	47	42
	85120/220	27	77	106	94	101	80
	85178/278	*	*	*	*	*	*
Arizona City	85123/223	*	*	27	30	38	33
Casa Grande	85122/222	34	185	216	191	165	154
	85130/230	N/D	*	N/D	*	N/D	*
	85193/293	*	*	*	*	*	*
	85194/294	*	*	*	*	*	*
Coolidge	85128/228	*	47	64	51	67	54
Eloy	85131/231	*	41	36	35	45	38
Florence	85132/232	*	43	38	39	43	31
Gold Canyon	85118/218	*	*	*	*	*	*
Hayden	85135	N/D	*	N/D	*	N/D	*
Kearny	85137/237	N/D	*	N/D	N/D	N/D	N/D
Mammoth	85618	N/D	N/D	N/D	N/D	N/D	N/D
Marana	85658	*	*	*	*	*	*
City of Maricopa	85138/238	*	49	63	54	81	74
	85139/239	*	48	41	34	44	36
Oracle	85623	*	*	*	*	*	*
Picacho	85141/241	N/D	*	N/D	*	N/D	N/D
Queen Creek	85142/242	*	*	*	*	*	*
Red Rock	85145/245	*	61	65	64	78	59
San Manuel	85631	*	76	80	56	69	59
San Tan Valley	85140/240	N/D	N/D	N/D	N/D	N/D	N/D
	85143/243	*	*	*	*	*	N/D
Stanfield	85172/272	N/D	N/D	N/D	N/D	N/D	N/D
Superior	85173/273	*	*	*	*	*	N/D
Tortilla Flat	85190	N/D	N/D	N/D	N/D	N/D	N/D
Valley Farms	85191/291	N/D	*	N/D	*	N/D	*
Winkelman	85192/292	*	*	*	*	N/D	*

Note. From Arizona Department of Economic Security. (2014). [RNA DES DATA FILE 2014]. Unpublished raw data received from First Things First State Agency Data Request. Non-zero data counts below 25 are suppressed according to FTF Guidelines. N/D indicates no data was available.

The number of families and children on a wait list for child care assistance is available for July 2011 and July 2012 (Exhibit 61). These data show that the number of Pinal families and children on the wait list increased by 56% and 50%, respectively, between July 2011 and July 2012. These increases mirror those statewide. Although additional data points are needed, it appears that the demand for child care assistance in both Pinal County and the state as a whole greatly exceed its availability.

**Exhibit 61. Families and Children on Child Care Assistance Waiting List, 2011 and 2012**

	July 2011		July 2012	
	Number of Families	Number of Children 0-5 Years	Number of Families	Number of Children 0-5 Years
<b>Pinal County</b>	101	155	158	232
<b>Arizona</b>	2245	3091	3513	4653

*Note.* From Arizona Department of Economic Security., 2014. [RNA DES DATA FILE 2014]. Unpublished raw data received from First Things First State Agency Data Request

## Professional Development

Professional development and education levels of staff are important elements of child care quality. According to the National Association of Early Childhood Teacher Educators (2008), the most effective teachers are those who have a strong foundation in early childhood education, most often acquired through higher education. Once in the classroom, teachers who have completed higher education courses in child development are more likely than teachers without higher education to be prepared to: apply knowledge of child development; use appropriate teaching strategies; meet the social/emotional demands of young children; understand children's thinking; know how to build student learning over time; and understand language and literacy development.

In recent years, Arizona has seen an increase in the educational attainment of its early education professionals. In Arizona's Unknown Education Issue: Early Learning Workforce Trends, First Things First explains that the percentage of assistant teachers with a credential (e.g., Child Development Associate) or college degree (Associate's Bachelor's, or Master's) rose from 21% in 2007 to 29% in 2012 (2012). Over the same period, the percentage of early education teachers with a college degree increased from 47% to 50%. The educational level of administrative directors slightly decreased from 74% in 2007 to 73% in 2012, although the percentage of administrators with a Bachelor's Degree slightly rose over the period.

A study of prekindergarten teachers across 40 states (Gilliam & Marchesseault, 2005) reported somewhat higher levels of educational attainment for early education professionals. Seventy-three percent of the teachers had a bachelor's degree; of the 27% that lacked such a degree, approximately half had no more than a high school diploma. Only 24% had a master's degree. Assistant teachers had even less education, with 59% having no more than a high school diploma.

A 2010 report by the Pew Center on the States recommended that all Pre-K teachers have both a bachelor's degree and special training in early childhood education (Bueno, Darling-Hammond & Gonzales, 2010). Additionally, a report from the Brookings-Rockefeller Project suggested that states should create innovative charter colleges to produce a well-trained professional early childhood workforce (Mead & Carey, 2011). The Pew Center on the States report further suggested that instituting such education requirements would support professionalization of the early childhood workforce, and lead to higher compensation, and thereby, easier recruitment and greater retention. Lacking such professionalization, salaries for early childhood teachers remain low. Bureau of Labor Statistics (2010) data shows that preschool teachers earned an average of \$27,130 (\$13.04 per hour) and child care workers earned an average of \$19,510 (\$9.38 per hour). A director of a preschool or childcare center had a median pay of \$43,950 (\$21.13 per hour). Some studies have found that wage incentives for early childhood teachers based on reaching a higher level of education attainment were in one case found to be effective only for retaining mid-wage teachers; a second found that teachers who received such incentives were actually less likely to remain in early childhood (Bridges, Fuller, Huang, & Hamre, 2011; Gable, Rothrauff, Thornburg, & Mauzy, 2007).

A 2011 study that ranked 200 occupations based on income potential, work environment, stress, physical demands, and hiring outlook put child care work at number 186 (CareerCast, 2011). Recent research has highlighted the importance of providing professional development opportunities to early childhood educators. One study found that children who kept the same early childhood teacher scored higher in a number of areas than children who changed teachers during a year. These areas included fine motor, cognitive, and language skills, and teacher and parent-reported initiative. The



same study also found that boys were more negatively affected by a change in their teachers than girls (Tran & Winsler, 2011). The findings of other recent research suggest that professional development delivered via the internet may enhance the abilities of early childhood educators (Pianta, Mashburn, Downer, Hamre & Justice, 2010). Worthington et al. (2011) have suggested that it is important to offer incentives for early childhood educators to gain bilingual skills. The researchers identified current coping strategies used by the teachers in the study, such as having children translate to communicate with other children and parents, as having questionable effectiveness. Serving as a translator in such situations may also be overwhelming for young children. Worthington et al. also suggest that to optimally provide services to young children with limited English language ability will require language skills professional development for all types of early education staff and that such training must involve community collaboration to be effective.

First Things First statewide utilizes funded and unfunded approaches to improving the professional development of Arizona early childhood education providers. Several funded strategies that impact professional development are described below:



- Professional REWARD\$: This FTF-funded program offers stipends to early childhood educators who advance their education or maintain a designated length of continuous employment.
- T.E.A.C.H. Early Childhood® Arizona Scholarships: T.E.A.C.H. is a program administered by the Association for Supportive Child Care that offers scholarships to child care teachers, directors, and family care providers who want to pursue Early Care and Education studies at a community college.
- The Professional Career Pathways Project (PCPP): The program provides funding for tuition and textbooks to individuals employed as child caregivers in center-based programs, family child care providers, or family group homes who want to further their career path through studies in Early Care and Education course work at community colleges.

In addition to the funded approaches above, First Things First's strategic plan includes advocacy for increased wages for the early childhood workforce, and increased systems coordination between community colleges and universities. In SFY 2014, the Pinal Region supported professional development for early care educators in three main ways. The Pinal Regional Partnership Council allocated \$50,000 for non-T.E.A.C.H. higher education scholarships and credentialing for early care and education teachers, assisting 64 teachers. Due to a low demand, this program will serve 32 teachers in SFY 2015. In 2014, the Council also allocated \$78,894 for scholarships to attend Central Arizona College to recruit new early care and education professionals. The strategy succeeded in recruiting 15 individuals. Recruitment scholarship funding will remain at this level in SFY 2015. The third way the Pinal Region supported professional development was by providing \$74,250 in Professional REWARD\$ incentives to 66 early care and education teachers in the region. The Regional Partnership Council plans to provide such retention and educational advancement incentives to 64 such educators in SFY 2015. In SFY 2014, 83 teachers from the region also received T.E.A.C.H. scholarships funded by statewide First Things First.

The Child Care Professional Training, funded by the Department of Economic Security, is another child care worker professional development program. It provides a 60-hour comprehensive training program to individuals with minimal or no child care experience who seek entry level employment in the child care field. In Pinal County the trainings are provided by instructors from Yavapai College. Exhibit 62 shows the dates and number of participants in such trainings for the last two years. Yavapai College has scheduled two trainings in Pinal County in 2014, one in Apache Junction beginning in March 2014 and a second in Casa Grande starting in May 2014.

**Exhibit 62. DES Child Care Professional Training in Pinal County, 2013**

	Number of Participants	Total Number of Training Hours
June-July 2013	8	254

Note. From Personal communication from Ivonne Zuniga, DES/CCA, August 22, 2013. No trainings were held in the region in 2012.



# Supporting Families

## Family Support

In the early years of life, children's development rapidly progresses at a pace exceeding that of any subsequent stage of life. However, at this critical developmental stage many infants and toddlers live in vulnerable circumstances. One of the most consistent associations in developmental science is the association between economic hardship and compromised child development. Infants and toddlers in low-income families are at greater risk for developing learning disabilities, behavior problems, mental retardation, developmental delays, and health impairments.

Child health and developmental outcomes depend to a large extent on the capabilities of families to provide a nurturing, safe environment for their infants and young children. Unfortunately, many families have insufficient knowledge about parenting skills and an inadequate support system of friends, extended family, or professionals to help or advise them on child rearing. Home-visiting programs offer a mechanism for ensuring that at-risk families have social support, linkage with public and private community services, and ongoing education on their child's health, development and safety. When home visitation services are integrated with pediatric medical care, this resource has the potential to mitigate health and developmental outcome disparities.

Home visitation programs offer a variety of family-focused services to pregnant women and families with infants and young children. Research demonstrates that well-designed and well-run programs are effective in improving parenting skills and the intellectual development of at-risk young children (American Academy of Pediatrics, 2009) as well as reducing child abuse and maternal behavior problems that stem from drug and alcohol use (Zero to Three, 2007). Using home visiting programs as one strategy in the prenatal to pre-Kindergarten continuum can help prevent more long-term costs and promote healthy social and emotional development in later years. These programs offer information, guidance, and support directly to families in their home environments, eliminating many of the scheduling, employment, and transportation barriers that might otherwise prevent families from taking advantage of necessary services. While home visiting programs vary in their goals and content of services, in general, they combine health care, parenting education, child abuse prevention, and early intervention services for infants and toddlers and, in some cases, older preschool-aged children.

The Pinal Regional Partnership Council has identified the provision of home visitation services to infants, children, and their families as a key strategy for nurturing positive early child development, health, and learning. In SFY 2014, the Council awarded \$1,374,856 to home visitations programs in the region. These programs are contracted to serve 465 families although only 343 families were actually served. In SFY 2015, a total of 465 families are again contracted to be served. Support



for home visitation is consistent with two of the six First Things First School Readiness Indicators chosen for regional focus:

- The number/percentage children demonstrating school readiness at kindergarten entry in the development domains of social -emotional, language and literacy, cognitive, and motor and physical; and
- The percentage of families who report they are competent and confident about their ability to support their child's safety, health and well-being.

Exhibit 63 provides a list of home visiting programs and areas served within the Pinal Region.

**Exhibit 63. Home Visiting Programs in the Pinal Region**

<b>Program/Agency</b>	<b>Area(s) served</b>
Pinal County Healthy Families	Arizona City, Casa Grande, Coolidge, 11 Mile Corner, Eloy, Hidden Valley, La Palma, Maricopa, Picacho, Randolph, Stanfield, Toltec, Valley Farms
Arizona's Children Association Parents As Teachers	Pinal County
Pinal Gila Community Child Services	Pinal County
Arizona Partnership for Children	Pinal County

*Note:* From Human Services Resource Directory: Pinal County Healthy Families, United Way of Pinal County; Parents as Teachers, Arizona's Children Association; Pinal Gila Community Child Services, Inc.; Arizona Partnership for Children.

In addition to utilizing home visitation services, families in the Pinal Regional Partnership Council access other resources and services for their young children through private and government agencies. Exhibit 64 shows that over half (56%) of parents surveyed agreed or strongly agreed that it was easy to locate services they needed or wanted and 67% agreed or strongly agreed that services were very good. Thirty-seven percent of parents agreed or strongly agreed that they did not know if they were eligible to receive services and 58% reported that they were asked to fill out paperwork or eligibility forms multiple times. Fifty-five percent of respondents agreed or strongly agreed that services reflected their cultural values and 64% said services and materials were offered in their language. However, 39% reported that services were not available at convenient times or locations. Thirty-nine percent of parents felt that services did not meet all their family's needs, with 47% reporting they only received services after qualifying as having a severe need.

**Exhibit 64. Specific Perceptions of Services in the Pinal Region, 2012**

		<b>Strongly Disagree</b>	<b>Somewhat Disagree</b>	<b>Somewhat Agree</b>	<b>Strongly Agree</b>
<b>It is easy to locate services that I need or want.</b>	Region	11%	27%	24%	32%
	Arizona	7%	14%	35%	39%
<b>I do not know if I am eligible to receive services.</b>	Region	34%	12%	17%	20%
	Arizona	31%	12%	15%	27%
<b>I am asked to fill out paperwork or eligibility forms multiple times.</b>	Region	11%	12%	22%	36%
	Arizona	16%	13%	20%	33%
<b>Available services are very good.</b>	Region	6%	5%	35%	32%
	Arizona	6%	6%	30%	32%
<b>Available services reflect my cultural values.</b>	Region	18%	10%	24%	31%
	Arizona	14%	12%	32%	23%
<b>Service providers do not speak my language or materials are not in my language.</b>	Region	64%	2%	9%	12%
	Arizona	62%	9%	7%	9%
<b>Services are not available at times or locations that are convenient.</b>	Region	22%	15%	21%	18%
	Arizona	18%	22%	24%	18%
<b>Available services fill some of my needs, but do not meet the needs of my whole family.</b>	Region	22%	15%	21%	18%
	Arizona	24%	14%	20%	19%
<b>I cannot find services to prevent problems; I only qualify after problems are severe.</b>	Region	24%	8%	28%	19%
	Arizona	27%	15%	15%	20%

*Note.* From First Things First 2012 Family and Community Survey.

An important factor that influences parents' access to services for children less than five years of age is their level of knowledge regarding child development. Exhibit 65 shows that a higher percentage of the region's parents who completed the First Things First 2012 Family and Community Survey correctly answered 16 out of 21 questions concerning child development than did parents completing the survey statewide.

**Exhibit 65. Parent Understanding of Early Childhood, 2012**

	<b>Percent Correct Response</b>	
	<b>Region</b>	<b>Arizona</b>
When do you think a parent can begin to significantly impact a child's brain development? (rated prenatal)	43%	32%
At what age do you think an infant or young child being to really take in and react to the world around them? (rated right from birth)	42%	35%
In regard to a child's experience in their first year of life, which do you agree with more? (rated first year has a major impact on school performance)	90%	83%
At what age do you think a baby or young child can begin to sense whether or not his parent is depressed or angry, and can be affected by his parent's mood? (rated from birth to one month)	54%	51%
Children's capacity for learning is pretty much set from birth and cannot be greatly increased or decreased by how the parents interact with them. (rated definitely false)	64%	63%
In terms of learning about language, children get an equal benefit from hearing someone talk on TV versus hearing a person in the same room talking to them. (rated definitely false)	50%	44%
Parents' emotional closeness with their baby can strongly influence that child's intellectual development. (rated definitely true)	93%	84%
For a five-year-old, how important do you think playing is for that child's healthy development? (rated 9 or 10 out of 10)	81%	82%
For a three-year-old, how important do you think playing is for that child's healthy development? (rated 9 or 10 out of 10)	79%	78%
For a 10-month-old, how important do you think playing is for that child's healthy development? (rated 9 or 10 out of 10)	59%	64%
If a child walks up to the TV and begins to turn the TV on and off repeatedly, how likely is it that the child wants to get her parents' attention? (rated somewhat likely or very likely)	91%	84%
If a child walks up to the TV and begins to turn the TV on and off repeatedly how likely is it that the child enjoys learning about what happens when buttons are pressed? (rated somewhat likely or very likely)	95%	95%
If a child walks up to the TV and begins to turn the TV on and off repeatedly how likely is it that the child is angry at her parents for some reason or she is trying to get back at them? (rated not at all likely)	58%	71%
In this case of a child turning the TV on and off, would you say that the child is misbehaving, or not? (rated not misbehaving)	63%	82%
Should a 15-month-old baby be expected to share her toys with other children? (rated no, too young to share)	34%	52%
Should a 3-year-old child be expected to sit quietly for an hour or so? (rated no)	66%	72%
Can a six-month-old be spoiled? (rated no)	24%	39%
Picking up a three-month-old every time she cries? (rated appropriate)	52%	55%
Rocking a one-year-old to sleep every night because the child will protest if this is not done? (rated will likely spoil the child)	51%	61%
Letting a two-year-old get down from the dinner table to play before the rest of the family? (rated appropriate)	49%	51%
Letting a five-year-old choose what to wear to school every day? (rated appropriate)	63%	72%

Note. From First Things First 2012 Family and Community Survey.

Findings from the 2012 First Things First Family and Community Survey also provide insight into parents' satisfaction with the early childhood resources and services currently available to them (Exhibit 66). Most (84%) of the Graham/Greenlee parents surveyed were somewhat or very satisfied with the information available to them about children's development and health, as compared to 78% of parents statewide. Over half (55%) of the parents reported they were somewhat or very satisfied with how agencies that service young children and their families work together and communicate with other, as compared to 43% of the parents surveyed statewide. As some of the region's collaboration building initiatives only recently began, it will be interesting to observe whether parents' level of satisfaction with how agencies communicate and work with each other increases by the time the survey is next conducted.

**Exhibit 66. Parent Satisfaction with Early Childhood Resources and Services, 2012**

		Very Dissatisfied	Somewhat Dissatisfied	Somewhat Satisfied	Very Satisfied
<b>How satisfied are you with the community information and resources available to you about children's development and health?</b>	Pinal Region	5%	5%	47%	37%
	Arizona	4%	10%	39%	39%
<b>How satisfied are you with how care providers and government agencies work together and communicate with each other?</b>	Region	11%	16%	35%	20%
	Arizona	11%	18%	29%	14%

Note. From 2012 FCS (Data for vendors) FINAL, First Things First. Percentages do not total to 100% because at the regional statewide levels a small percentage of respondents did not answer the questions.

## Child Abuse/Neglect

Significant research has been done on child abuse and neglect in efforts to understand what factors may contribute to positive and negative outcomes for youth. For example, the literature shows that child abuse in the years prior to kindergarten has also been found to negatively impact early school success (Fantuzzo, Perlman, & Dobbins, 2011). Identified factors can be categorized according to such descriptors as societal, community, family/parental, and child specific risk and protective factors. Increasingly, research suggests that it is a complex interplay of these factors that impacts the likelihood of abuse and neglect (Peirson, Laurendeau, & Chamberland, 2001). Recent analysis of data from three longitudinal studies of low-income families with young children by Slack et al. (2011) shows an association between various indicators of economic hardship and subsequent neglect. While acknowledging that many low-income parents provide good care to their children, Slack et al. suggest that understanding this association may be useful to social service agencies in the design of risk assessment tools effective preventative services.

Exhibit 67 shows that the number of substantiated child abuse reports in Pinal County ranged from 69 to 135 for the seven reporting periods, beginning with April 2010 through September 2010 and ending with April 2012 through September 2013. The number of substantiated reports has steadily decreased from a high of 135 in April 2011 through September 2011. The substantiation rate over the seven periods has ranged from 3.1% to 5.4%. The last period for which data are reported, April 2012 -September 2013, had the highest number of new removals (159) of all seven periods.

It is worth noting that a child abuse report is neither an indicator of risk nor does it lead to a child's removal from their home. Moreover, lack of substantiation is often due to a lack of resources in the child welfare system. The state's fiscal crisis led to a statewide decrease in the number of CPS staff, resulting in average caseloads that were approximately 67% above state and national standards. During the period of the financial crisis, CPS had a turnover rate as high as 26% for case managers and 10% for supervisors (Reinhart, 2012). In September 2012, state child welfare officials reported that CPS caseworker staffing was again at full capacity, including the people in training (Arizona Public Media, 2012). However, in late 2013 it was reported that more than 6,000 cases of child abuse had gone uninvestigated in the previous four years. In response, Governor Brewer created an independent team to investigate those cases (Arizona Public Media, 2013a). At the end of January 2013 the state passed emergency legislation to hire 50 additional CPS workers (Arizona Public Media, 2013b). Given such a backlog of investigations, it is likely that constraints within CPS impacted Pinal County during some of the reported periods.

**Exhibit 67. Child Abuse Reports, Substantiations, Removals, and Placements, 2009-2013**

	<b>Apr. 2010 through Sept. 2010</b>	<b>Oct. 2010 Through Mar. 2011</b>	<b>Apr. 2011 through Sept. 2011</b>	<b>Oct. 2011 through Mar. 2012</b>	<b>Apr. 2012 through Sept. 2012</b>	<b>Oct. 2012 Through Mar. 2013</b>	<b>Apr. 2013 through Sept. 2013</b>
<b>Number of reports received†</b>	1,169	1,120	1,478	1,378	1,428	1,365	1,606
<b>Number of reports substantiated</b>	103	122	135	123	118	81	69
<b>Substantiation rate‡</b>	4.6%	5.4%	5.4%	4.5%	4.2%	3.1%	4.7%
<b>Number of new removals</b>	115	100	132	137	140	110	159

Note. From Child Welfare Reports, Oct. 2009 – Mar. 2010; Apr. 2010 – Sept. 2010; Oct. 1, 2010-Mar. 31, 2011; Apr. 1, 2011 – Sept. 30, 2011; Oct. 1 2011-Mar. 31, 2012; Apr. 2012 – Sept. 2012; Oct. 1, 2012-Mar. 31, 2013, Apr. 2012 through Sept. 2013. - Tables 2,3,15, 16, 21, and 22. Arizona Department of Economic Security. Retrieved on August 27, 2013 from <https://www.azdes.gov/appreports.aspx>. The latest available data are reported for each period. Each Child Welfare Report includes data for that period and data for the period preceding it. In some cases, data from the earlier period have been revised. In those cases, revised data are provided in this table. †"Reports received" includes data for reports characterized by the risk level high, moderate, low, and potential. ‡Substantiation rates are computed based on the total number child abuse cases assigned for investigation whose risks levels were assessed as low, medium, or high risk. It excluded reports reported labeled in the Child Welfare Reports as "potential."

## Foster Care

The number of children in foster care in the United States has been steadily decreasing over the last seven years from 510,699 in 2005 to 408,425 in 2010. Over that same time period, the number of foster care children in Arizona has varied from a low of 9,099 in 2007 to a high of 9,930 in 2010 (U.S. Department of Health and Human Services, 2011). Children are placed in foster care settings for a variety of reasons and few are reunified with their parents. One study has found that on average, the duration of care was 48.6 months, suggesting that many youth in foster care (approximately seven out of every ten) will age out of the welfare system before they can be reunited with their biological or adopted families (Cheng, 2010). Youth who age out of foster care are at an increased risk for a range of poor outcomes related to employment, education, housing, criminal activity, physical and mental health, substance abuse, and child bearing (Stott & Gustavsson, 2010). Many of these risk factors hold true even for youth who are adopted or for whom permanent environments are established. Recent research has highlighted best practices in collaboration between law enforcement and CPS in the investigation of child maltreatment that lead to optimal outcomes for children (Garcia et al., 2014).

The stated policy of the Arizona DES is to avoid children's repeat entry into foster care, while ensuring the best interests of children and their families. Child Welfare Reports show that 579 children in Pinal County were removed from their homes in the most recently reported year, October 2012 to September 2013 (Exhibit 68). In the second half of the year, the percentage of children with a prior removal in the prior 12 months increased substantially from 4.7% to 8.3%. However, the percentage of Pinal County children entering foster care who were removed on another occasion in the prior 24 months decreased from 3.9% in the period from October 2012 to March 2013 to 3.1% in the period from April 2013 to September 2013.

**Exhibit 68. Children Entering Out-of-Home Care by Prior Placements, 2013**

	Number of Children Removed		Number of Children with Prior Removal in Last 12 Months		Percent of Children with Prior Removal in Last 12 months		Number of Children with a Removal in Prior 12 to 24 Months		Percent of Children with a Removal in Prior 12 to 24 months	
	Oct. 2012-Mar. 2013	Apr. 2013-Sept. 2013	Oct. 2012-Mar. 2013	Apr. 2013-Sept. 2013	Oct. 2012-Mar. 2013	Apr. 2013-Sept. 2013	Oct. 2012-Mar. 2013	Apr. 2013-Sept. 2013	Oct. 2012-Mar. 2013	Apr. 2013-Sept. 2013
<b>Pinal County</b>	254	325	12	27	4.7%	8.3%	10	10	3.9%	3.1%
<b>Arizona</b>	5,101	5,702	446	523	8.7%	9.2%	147	130	2.9%	2.3%

Note. From Child Welfare Report 1st Oct 2012 to 31st Mar 2013 (Table 31) and 1<sup>st</sup> Apr. 2013 to 30 September 2013. Arizona Department of Economic Security.



## Juvenile Justice

When children enter the juvenile justice system it is often the culmination of a history of psychological and academic problems. A youth's entry, exit, and continued involvement in the juvenile justice system are influenced by a range of individual, social, and environmental factors. For example, race/ethnicity, gender, history of mental health, substance abuse, trauma, delinquency, family conflict, poverty, prior social service involvement, and geographic location may impact a youth's likelihood involvement in juvenile justice. (Maschi, Hatcher, Schwalbe & Rosato, 2008). Thus, the number of a region's children who are in the juvenile justice system may be taken as a measure of the efficacy of early child development programs and services in a region. Nationwide, the number of children age's seven to 12 referred to juvenile courts increased by 33 percent in the 1990s. Research has shown that children who become delinquents at an early age are "two to three times more likely to become serious, violent, and chronic offenders than adolescents whose delinquent behavior begins in their teens" (Loeber, Farrington & Petechuk, 2003). Involvement in the juvenile justice system is of ongoing concern as, on average, over half of juvenile delinquents go on to become adult offenders. (Eggleston & Laub, 2002). The National Evaluation and Technical Assistance Center for the Education of Children and Youth Who Are Neglected, Delinquent, or At Risk (NDTAC) promotes a set of best practices for working with families that have children in the juvenile justice system (Osher & Huff, n.d.).

The number of juvenile cases filed in Pinal County Superior Court from 2010 to 2012 is reported in Exhibit 69. Over the three years there were noticeable trends in only two of the judicial processes that are reported on: the percentage of cases dismissed and the percentage of youth that receive standard probation have both steadily decreased.

**Exhibit 69. Youth Processed in the Juvenile Justice System, Fiscal Years 2011 and 2012**

	<b>2010</b> (Referred = 1,851)	<b>2011</b> (Referred = 1,741)	<b>2012</b> (Referred = 1,683)
<b>Detained</b>	800 (43%)	743 (43%)	666 (40%)
<b>Diverted</b>	588 (32%)	506 (29%)	503 (30%)
<b>Petition Filed</b>	957 (52%)	802 (46%)	771 (46%)
<b>Dismissed</b>	472 (25%)	340 (20%)	309 (18%)
<b>Penalty Only</b>	36 (2%)	19 (1%)	10 (1%)
<b>Standard Probation</b>	575 (31%)	474 (27%)	393 (23%)
<b>JIPS</b>	115 (6%)	99 (6%)	84 (5%)
<b>Committed to ADJC</b>	38 (2%)	50 (3%)	32 (2%)

*Note.* From *Arizona's Juvenile Court Counts, Statewide Statistical Information: FY2010; FY2011; FY 2012*, Administrative Office of the Courts, Juvenile Justice Services Division, Research and Information Unit. Data reported for juveniles ages 8 through 17. Cases for juveniles below age 8 are handled through Child Protective Services or other agencies. Referred indicates juveniles for whom a report was submitted to the juvenile court alleging the youth committed a delinquent act or incorrigible behavior. Diverted denotes a process by which a juvenile is able to avoid formal court processing and to have the referral alleging an offense adjusted if the juvenile fulfills one or more conditions. Petitions Filed refers to legal documents filed in the juvenile court alleging that a referred youth is delinquent, incorrigible, or dependent and which requests the courts to assume jurisdiction over the youth. Dismissed denotes the number of youth with petitions against them that were dismissed. The dismissal of a petition may occur because of a lack of evidence, extension of unfulfilled diversion conditions, disposition of other charges, etc. JIPS = Juvenile Intensive Probation.



## Health

The health and safety of children is of the utmost importance to parents. Parents want to live in communities where they know their children will receive health services and care needed to develop into healthy adults. Research suggests that poor health in childhood can have lasting and cumulative effects on overall health and well-being (Russ, Garro & Halfon, 2010), such as unaddressed physical, developmental, and mental health problems (Keating & Hertzman, 1999). Prenatal care for mothers is also crucial in preventing birth outcomes that may have lasting effects on children's health.

While the last 50 years have seen declines in child mortality, rates of acute illness, and pediatric hospitalizations, there appears to be an increase in chronic illness (Wise, 2007). The percentage of American children ages 2-19 who are obese has almost tripled over the last three decades and approximately one in six children and adolescents between the ages of two and 19 are obese (Centers for Disease Control and Prevention, n.d.). Recent analysis of data from the National Health and Nutrition Examination Survey found that the percentage of children age's two to five who are obese increased from 5% in 1976-1980 to 10.4% in 2007-2008 (National Center for Health Statistics, 2010). Another study found a high prevalence of obesity and other chronic conditions in three nationally representative cohorts of children, which was gradually increasing in each cohort. (Van Cleave, Gortmaker & Perrin, 2010). Furthermore, childhood obesity rates vary greatly based on demographic factors such as ethnicity and socioeconomic status. In 2007-2008, the obesity rate for Mexican American adolescent boys (26.8%) far exceeded the rate for white adolescent boys (16.7%). The obesity rate for low-income preschool-aged children (17%) is far above the 2007-2008 figure (10.4%) for all children age's two to five (National Center for Health Statistics, 2010). If current trends continue, it is estimated that by 2030, 16-18% of all health care expenditures in the U.S. will be attributable to overweight/obesity (Wang, Beydoun, Liang, Caballero, & Kumanyika, 2008).



Experts have suggested that initiating strategies to prevent the onset of chronic diseases in childhood can help limit the onset of chronic diseases in adulthood (Halfon & Newacheck, 2010). The Committee on Obesity Prevention Policies for Young Children of the Institute of Medicine of the National Academies (2011) has determined goals and action steps to prevent obesity in young children. Goals include: assessing and monitoring growth during early childhood; using social marketing to provide high quality information and strategies for the prevention; increasing the amount of physical activity engaged in by young children; and creating indoor and outdoor environments that promote physical activity.

In response to 2006 and 2009 Institute of Medicine reports on the growing obesity rates among children and the amount of fast food advertising directed to children Congress directed the Federal Trade Commission (FTC) to begin studying food and beverage marketing to children and teens. In 2009 marketing expenditures targeting youth totaled \$1.8 billion (Powell et al., 2013). Although 2012 data show that total expenditures by fast-food restaurant chains have

decreased by about 20%, some chains have increased spending on promotional not covered under, a voluntary self-regulation program begun by large food and beverage companies. Such marketing techniques include product placement in movies and videos and cross-promotion licenses (Powell et al., 2013; Berhardt et al., 2013).

Other significant health disparities beyond obesity exist for children in the United States based on their socioeconomic status. Children who live in low-income households have been shown to have worse health outcomes than their peers from higher income households (Starfield, Robertson, & Riley, 2002; Larson & Halfon, 2010). This study found that the child health outcomes were positively correlated to family income.

With the high costs associated with health care, most families are dependent on health insurance to cover needed services. The expansion of public insurance programs such as the State Children's Health Insurance Program (CHIP) and The Individuals with Disabilities Act (IDEA) has played an important role in expanding health care access to children. The National Health Interview Survey (NHIS) found that the rate of uninsured children decreased from 14% in 1997 to 7% in the first quarter of 2011. Over that same period, the percentage of children covered by public insurance dramatically increased from 20-40%, while usage of private coverage fell. Children from lower socioeconomic strata of society particularly benefit from public insurance programs. The 2011 NHIS survey reported that 84% of poor children and 61% of near poor children were covered by such program (Cohen & Martinez, 2011).

Many families, however, are uninsured or underinsured. One study of 43,509 children ages 2-17 (living with at least one parent) found that 74% of both children and parents were insured, 8% were both uninsured, and 19% had discordant patterns of coverage. Overall, about 12%, or roughly seven point four million U.S. children each year, are uninsured (DeVoe, Tillotson, & Wallace, 2009).

In general, access to health insurance is associated with increased utilization of health services (Seldon & Hudson, 2006) as well as fewer unmet health needs (Kenney, 2007). The Center for Budget and Policy Priorities suggested that public health insurance may offer better access to health care at a lower cost than private health insurance (Ku, 2007). A large number of children are expected to benefit from implementation of the Affordable Care Act (ACA). Provisions of the act that benefit children include: funding for maternal, infant, and early childhood home visitation programs; eliminating the denial of care due to a pre-existing condition; and a two year extension of funding for the Children's Health Insurance Act through the end of the 2015 (Voices for America's Children, n.d.).

Children's healthy development benefits from access to comprehensive preventive and primary health services that include screening and early identification for developmental milestones, vision, hearing, oral health, nutrition and exercise, and social-emotional health (Bruner, 2009). Eighty-eight percent of Graham/Greenlee parents responding to the 2012 First Things First Family Community Survey agreed that children age five and under should have regular visits at the same doctor's office. The following sections detail a variety of health indicators for the Graham/Greenlee Region including: health insurance coverage and access, prenatal care and healthy births, access and utilization of a range of other health programs/services, immunization rates, and child mortality and morbidity, among other indicators.

## Health Insurance Coverage and Utilization

In April 2012, the Centers for Medicare and Medicaid Services approved funding for a new health insurance programs for children, KidsCare II. KidsCare II at first began enrolling children from the KidsCare waiting list, but later opened enrollment to all children whose family met income eligibility. The KidsCare II income eligibility level as of May 2013 was 200% of the Federal Poverty Level. Funding was only available for a limited number of children, with prioritization based on how long a child had been on the waiting list. The 203% increase in enrollment from February 2012 to February 2014 reflects the input of new funding (Exhibit 64). However, the KidsCare/KidsCare II program ended on January 31, 2014. A small number of children who were in the KidsCare program prior to when enrollment was frozen in January 2010 and whose parents have made timely payment of premiums over the whole period continue to be served by the program.

It is expected that some children formerly served by KidsCare will enroll in health insurance through the Affordable Care Act (ACA). However, the ACA requires all individuals whose employer offers health insurance to take advantage of this benefit rather than purchase health insurance through the ACA. While some individuals may acquire health insurance for themselves in this way, employers are not obligated to provide such a benefit to an employee's family members. Some individuals may not be able to afford the additional costs of adding their children on to their health insurance plan. In all states except Arizona, federal funds supplemented by state funds helps children living under 200% of the poverty level purchase



health insurance through the Affordable Care Act. Therefore, it is likely that some children who formerly received health insurance coverage though Kids Care II will now be uninsured.

Exhibit 70 shows the figures for enrollment of children in the state's KidsCare program. County-wide enrollment dropped sharply from February 2010 to February 2011. The significant decrease in the number of children enrolled in KidsCare was primarily a result of a statewide freeze on program enrollment

as of January 1, 2010. From the beginning of 2010 to April 2012 only renewing applications were accepted; other eligible families were placed on a waiting list. Regular factors such as children reaching 18 years in age and, thereby, aging out of the program, families failing to pay a monthly premium, or families' income increasing to a level above program eligibility also likely contributed to the decrease.

**Exhibit 70. KidsCare Enrollment, 2009-2014**

	February 2009	February 2010	February 2011	February 2012	February 2013	February 2014
<b>Pinal County</b>	1,883	1,513	817	432	1,308	68
<b>Arizona</b>	59,574	42,162	22,153	12,147	35,147	2,296

*Note.* From *KidsCare Enrollment, Arizona*, Arizona Health Care Cost Containment System (AHCCCS).

Although the Pinal Regional Partnership Council does not directly provide any form of health insurance for children, it does fund programming that helps keep young children healthy. In SFY 2014, the region allocated \$156,375 to provide qualified health professionals who assist child care providers in achieving high standards related to health and safety for the children in their care. A total of 75 centers and homes were served. The Regional Partnership Council decided to reduce the number of non-Quality First center and homes served through this programming to 55 in SFY 2015. In total, 55 centers and homes will be served in 2015.

## Public Health Clinics

As of September 2013, the Pinal Region operated twelve public health clinics (Exhibit 71) that are designed to be permanent locations for public health services. Services available at these facilities include:

- Childhood Immunizations (no charge for children 18 and under)
- Well Woman Health Checks
- Cervical Cancer screenings
- Breast Cancer screenings
- Testing and treatment for sexually transmitted diseases
- Reproductive health services (non-surgical)
- Administration of the WIC Program (Women, Infant & Children nutrition education for eligible families)
- Flu shots

A map showing the location of the Pinal Region's public health clinics is in Appendix C. A second map that shows the location of other health care facilities within Pinal County and in bordering areas of neighboring counties may be found in the same appendix.

**Exhibit 71. Pinal Public Health Clinic Locations and Services**

Community	Location	Days of Services
<b>Ak-Chin Village</b>	48203 W. Farrell Rd.	Mon-Fri 8am-5pm
<b>Apache Junction</b>	575 N. Idaho Rd.	Wednesday-Saturday 8am-6pm (WIC) Wednesday-Friday 8am-6pm (Nursing)
<b>Casa Grande</b>	820 E. Cottonwood Ln.	Monday-Saturday 8am-6pm (WIC and Nursing)
<b>Coolidge</b>	119 W. Central Ave.	Thursday-Friday 8am-6pm (WIC and Nursing)
<b>Eloy</b>	302 E. 5th St.	Closed for Maintenance Tuesday-Wednesday 8am-6pm (WIC and Nursing)
<b>Mammoth</b>	110 S. Main St.	Thursday-Friday 8am-6pm (Nursing, WIC on Saturday only)
<b>Oracle</b>	1870 W. American Ave.	2nd, 3rd, and 4th Fridays 8am-6pm (WIC only)
<b>Kearny</b>	355 Alden Rd.	3rd Wednesday 8am-6pm (WIC and Nursing)
<b>Superior</b>	60 E. Main St.	2nd and 4th Thursday 8am-6pm (WIC only) 2nd Wednesday 8am-6pm (Nursing only)

Community	Location	Days of Services
San Tan Valley	36375 N. Gantzel Rd.	Monday-Thursday 8am-6pm (WIC and Nursing)
Maricopa	41600 W. Smith-Enke Rd., Bldg. 15	Tuesday-Friday 8am-6pm (WIC and Nursing)
San Manuel	23 S. McNab Parkway	1st and 3rd Thursday 8am-6pm (WIC only)

Note. From *Office Locations, 2014*, Pinal County Department of Public Health; *Office Locations, 2014*, Gila River Healthcare.

## Healthy Births

A women's utilization of pre and perinatal care have important short and long-term implications for child health. It is recommended that a woman have monthly medical visits throughout her pregnancy. The Arizona Department of Health Services tracks the number of prenatal visits associated with each birth. The number of births in a year may serve as a reasonable, though not exact, proxy for the number of women that give birth. Arizona Department of Health Services data from 2008 to 2011 show that Pinal County fared better than the state in the number of prenatal visits by pregnant women. Exhibit 72 shows that in Pinal County, from 2008-2011 the percentage of women who had at least nine prenatal visits stayed within the 81-85% range. The percentage of women who had 13 or more prenatal visits increased to 31% in 2011. These data suggests that the majority of pregnant women visited their doctor at least once a month, on average, during their pregnancy.

**Exhibit 72. Births by Number of Prenatal Visits, 2008 -2012**

	Number of Visits	Percentage of Mothers 2008	Percentage of Mothers 2009	Percentage of Mothers 2010	Percentage of Mothers 2011	Percentage of Mothers 2012
<b>Pinal County</b>	No visits	2%	2%	2%	2%	1%
	1-4 visits	2%	2%	2%	2%	3%
	5-8 visits	15%	12%	10%	12%	12%
	9-12 visits	52%	60%	60%	52%	48%
	13+ visits	29%	25%	25%	31%	36%
<b>Arizona</b>	No visits	2%	2%	2%	2%	1%
	1-4 visits	4%	4%	3%	3%	4%
	5-8 visits	17%	16%	14%	14%	14%
	9-12 visits	48%	49%	49%	47%	47%
	13+ visits	30%	30%	32%	34%	35%

Note. From Table 5B-12 – Births by Number of Prenatal Visits and County of Residence, Arizona, 2008-2012; Arizona Birth and Maternal Characteristics, 2009-2012, Health Status and Vital Statistics, Arizona Department of Health Services. Percentages are rounded.

Low birth weight babies are at risk for serious health problems as newborns that may affect their health throughout their lives. Information regarding the prevalence of low birth weight babies for Pinal County is presented in Exhibit 73. Low birth weight is defined as a baby that is less than 5.8 pounds at birth. The data show that the percentage of low birth weight babies born in Pinal County between 2008 and 2012 has generally been lower than the statewide rate. However, the rate has risen over the last two reported years from 6.6% in 2010 to 7.2% in 2012.

**Exhibit 73. Low Birth Weight Rates, 2008-2012**

	2008	2009	2010	2011	2012
<b>Pinal County</b>	6.3%	7.0%	6.6%	6.9%	7.2%
<b>Arizona</b>	7.1%	7.1%	7.1%	7.0%	6.9%
<b>United States</b>	8.2%	N/A	N/A	N/A	N/A

Note. From Table 5B-17 Low Birthweight Birth Ratios In The United States And In Urban And Rural Counties Of Arizona, 2000-2012; Arizona Birth and Maternal Characteristics, 2009-2012, Arizona Department of Health Services, Health Status and Vital Statistics. Low birth weight is defined as less than 5.8 pounds at birth. Data are per 1,000 live births. NA = not available.

Low birth weight babies are more likely to require immediate intensive health care than other newborns. Exhibit 74 shows that in 2012 there were 192 newborns in Pinal County admitted into intensive care units. Of the admitted babies, 106 (55%) were pre-term and 108 (47%) had a low birth weight.

**Exhibit 74. Newborns Admitted to Intensive Care Units, 2012**

	Total	Preterm	<2,500 Grams
<b>Pinal County</b>	192	106	91
<b>Arizona</b>	4,158	2,380 <sup>†</sup>	2,050 <sup>†</sup>

Note. From Table 5B-24 Newborns Admitted To Newborn Intensive Care Units By Gestational Age, Birthweight, and Mother's County of Residence, Arizona, 2012, Health Status and Vital Statistics, Arizona Department of Health Services. For this report, the Arizona Department of Health Services considers low birth weight to be less than 2,500 grams. <sup>†</sup> Health Status and Vital Statistics states: "Sum rounded to nearest tens unit due to non-zero addend less than 6."

Exhibit 75 shows statistics on characteristics of newborns and activities of expectant mothers for Pinal County and statewide in 2012. For preterm births, births with abnormal conditions reported, complications with labor and/or delivery, and circumstances that resulted in a caesarean birth, the Pinal rates exceeded those of the state as a whole. Regarding risk related behaviors of women during pregnancy, less than 1% of expectant women used alcohol during pregnancy, same as the statewide rate. However, 7% of pregnant women in the county used tobacco during pregnancy, surpassing the statewide rate of 4%.

**Exhibit 75. Occurrence of Selected Characteristics of Newborns and Expectant Mothers, 2012**

	Pinal County	Arizona
<b>Preterm Births (gestational age &lt;37 weeks)</b>	10%	9%
<b>Births with complications of labor and/or delivery</b>	33%	32%
<b>Births with abnormal conditions reported</b>	16%	10%
<b>Births with medical risk factors reported</b>	38%	38%
<b>Primary and repeat caesarean births</b>	30%	28%
<b>Infants admitted to newborn intensive care units</b>	4%	5%
<b>Tobacco used during pregnancy</b>	7%	4%
<b>Alcohol use during pregnancy</b>	<1%	<1%

Note. From Table 5B-30 Rates of Occurrence for Selected Characteristics of Newborns and Mothers Giving Birth by County of Residence, Arizona, 2012, Arizona Department of Health Services, Health Status and Vital Statistics. Rate is per 100 births. Less than 2,500 grams is considered low birth weight. Arizona data does not include one pre-term and two full-term births for which weight data is not known.



Exhibit 76 presents the characteristics of newborns and prenatal care accessed by expectant mothers across communities in Pinal County. Births to teen mothers varied greatly by community, from 2% in Marana to 17% in Eloy. Births to unwed mothers ranged from 16% in Queen Creek to 62% in Coolidge. Regarding prenatal care, between 76% and 93% of women in Pinal communities received care during their first trimester. In a majority of areas, 1% or less of pregnant women did not receive any prenatal care during their pregnancy, but in two communities (Eloy and Casa Grande) that figure was 4%. In 2011, low birth weight newborns ranged from a low of 4% in Gold Canyon to 8% in Apache Junction, Casa Grande, Coolidge, Eloy, and Saddlebrooke. For the majority of communities, between 20% and 70% of births were paid for by public funds. Exhibit 77 presents selected 2012 data available for the Ak-Chin Indian community.

**Exhibit 76. Selected Birth Statistics by Community, 2012**

Community	Total Number of Births	Mother <19 yrs	Unwed Mother	Prenatal Care in 1st Trimester	No Prenatal Care received	Low Birth-weight Newborn	Public Payee for Birth
Apache Junction	449	14%	56%	84%	*	8%	60%
Casa Grande	756	12%	53%	79%	2%	8%	65%
Coolidge	275	15%	58%	73%	4%	5%	68%
Eloy	394	13%	61%	74%	3%	8%	73%
Florence	232	11%	48%	85%	*	11%	49%
Gold Canyon	272	14%	81%	83%	*	6%	81%
Marana	667	3%	24%	83%	*	6%	27%
Maricopa	779	8%	31%	92%	*	8%	36%
Queen Creek	487	3%	19%	95%	0%	5%	24%
Saddlebrooke	116	11%	59%	73%	*	9%	64%
San Tan Valley	1,385	5%	27%	89%	<1%	6%	36%
Arizona	85,725	9%	45%	83%	1%	7%	55%

Note. From Table 9A Selected Characteristics of Newborns and Mothers by Preliminary Health Analysis Areas, 2012, Arizona Department of Health Services, Health Status and Vital Statistics. Nonzero data counts smaller than 25 were suppressed according to FTF Guidelines.

**Exhibit 77. Ak-Chin Birth Characteristics, 2012**

	Statistic
Births/1000 residents	16.3
Percentage not receiving prenatal care	4.6%

Note. From Ak-Chin Indian Community Primary Care Area 2012, Statistical Profile, Bureau of Health Systems Development, Arizona Department of Health Services.

In 2012, there were 121 births in Pinal County to mothers under the age of 17 of whom 115 (95%) were unmarried (Exhibit 78). The Arizona Health Care Cost Containment System (AHCCCS) paid for 100 (83%) of these births while private insurance paid for 13 (11%) of these births. Of the 329 births to teens 18-19 years old, 87% were to unmarried women. AHCCCS paid for 263 (80%) of the births to women in this age group.

**Exhibit 78. Teen Births by Marital Status and Payee for Birth, Pinal County, 2012**

	Marital Status		Payee for Birth			
	Married	Unmarried	AHCCCS	IHS	Private Insurance	Self
<b>&lt; 15 years</b>	*	*	*	*	*	*
<b>15-17 years</b>	*	115	100	*	*	*
<b>18-19 years</b>	44	285	263	*	44	*

*Note.* From Table T23 – *Selected Characteristics of Newborns and Women Giving Birth, Pinal County, Arizona, 2012*, Arizona State Department of Health Services Vital Statistics. \* Number suppressed due to count less than 25.

## Immunizations

The importance of immunizations for young children cannot be over-emphasized.

Immunizations are a health measure that has made one of the most important contributions to public health in the past century (Pruitt, Kline & Kovaz, 1995). According to the Center for Disease Control (CDC) (n.d.), if an unvaccinated child is exposed to a disease, the child's system may not be strong enough to fight off the disease. The CDC also notes that immunizing children helps protect the health of the community, particularly others who are not immunized, including those who are too young or have medical reasons that prevent immunization.

Immunization also helps to slow or stop disease outbreaks when they occur. Despite the recognized importance of early childhood immunizations, a 2011 analysis of national data found that an increasing percentage of parents are refusing to have their children vaccinated (Stobbe, 2011). Decreased levels of immunization have been linked to recent increases in cases of vaccine-preventable diseases, such as measles, mumps, whooping cough, and Haemophilus influenzae (Hib) (Atwell, 2012; Purlain, 2011; Immunization Action Coalition, n.d.). Public health experts have suggested a variety of strategies to reduce the rate of nonmedical exemptions. These include education about the risks and benefits of vaccines; increasing the financial liability of those whose exempted children go on to contract and cause an outbreak of a disease; and a tax on those who refuse have their children vaccinated (Constable, Blank, & Caplan, 2014). Important indicators of child health are the percentage of young children who have completed vaccination series. The Arizona State Immunization Information System (ASIIS) tracks two series of vaccinations. The 3:2:2:2 series of vaccinations is administered between 12 and 24 months of age, which includes:

- 3 DTaP/DT (Diphtheria/Pertussis/Tetanus) vaccinations;
- 2 IPV (Inactivated Polio Virus);
- 2 Hib (Haemophilus Influenza type b) vaccinations; and
- 2 HBV (Hepatitis B Virus)vaccinations.



The 4:3:1:3:3:1 series of vaccinations is administered between 24 and 35 months of age, which consists of:

- 4 DTaP/DT (Diphtheria/Pertussis/Tetanus) vaccinations;
- 3 IPV (Inactivated Polio Virus) vaccinations;
- 1 MMR (Measles/Mumps/Rubella) vaccination;
- 3 Hib (Haemophilus Influenza type b) vaccinations;
- 3 HBV (Hepatitis B Virus)vaccinations; and
- 1 VZV (Varicella-Zoster Virus) vaccination.

ASIS-based coverage level estimates are nearly always lower than actual coverage levels given the challenges in determining a completion rate. Fragmented records, children relocating out of state before completing their immunizations, and duplication of records are some reasons for these challenges. Exhibit 79 shows that from 2010 to 2012 the completion rate for the 3:2:2:2 series was 73-74% and in each year surpassed the statewide rate. Of the four vaccinations that make up the series, the DTAP vaccination was the one that the lowest percentage of children ages 12-24 months received.

**Exhibit 79 Children Ages 12-24 Months Receiving 3:2:2:2 Vaccination Series, 2010-2012**

	Year	Children Receiving any Vaccination	Percentage that Completed Series	Percentage Vaccinated			
				DTAP	IPV	HIB	HBV
<b>Pinal County</b>	2010	4678	73%	75%	84%	84%	87%
	2011	4528	73%	75%	84%	85%	88%
	2012	5083	73%	75%	85%	86%	89%
<b>Arizona</b>	2010	104293	72%	74%	82%	83%	87%
	2011	96735	71%	73%	82%	83%	86%
	2012	93193	69%	72%	81%	82%	85%

Note. From Arizona Department of Health Services, Arizona State Immunization Information System. 2010\_1224\_3222, 2011\_1224\_3222, and 2012\_1224mo\_3222. (Excel databases provided by FTF). The Arizona Department of Health Services collects data from child care centers.

The percentage of Pinal children ages 19 to 35 months that completed the 4:3:1:3:3:1 vaccination series from 2010 to 2012 varied from 49% to 51% (Exhibit 80). These rates nearly mirrored the state rates for those years. As with the 3:2:2:2 vaccination series, the DTAP was the vaccination that the lowest percentage of children ages 19-35 months received.

**Exhibit 80. Children Ages 19-35 Months Receiving 4:3:1:3:3:1 Vaccination Series, 2010-2012**

	Year	Children Receiving any Vaccination	Percentage that Completed Series†	Percentage Vaccinated					
				DTAP	IPV	MMR	HIB	HBV	VZV
Pinal County	2010	6668	51%	59%	74%	77%	76%	75%	75%
	2011	6150	50%	58%	74%	76%	77%	74%	74%
	2012	6311	49%	56%	73%	76%	76%	73%	75%
Arizona	2010	147795	50%	58%	71%	76%	74%	74%	75%
	2011	136941	51%	58%	72%	75%	75%	73%	74%
	2012	128337	48%	55%	70%	74%	73%	71%	73%

Note. From Arizona Department of Health Services, Arizona State Immunization Information System. 2010\_1935\_4313314, 2011\_1935\_4313314, and 2012\_1935mo\_4313314. (Excel databases provided by FTF). The Arizona Department of Health Services collects data from child care centers. †Including the four-dose PCV vaccination negatively skews the % series completion.

Zip code-level data for 2012 from the Arizona Department of Economic Security shown in Exhibits 81 and 82 demonstrate large geographic variability in receipt of vaccinations. The percentage of children ages 12-24 months old who received the 3:2:2:2 vaccination series ranged from 4-94%. In 16 of the 21 of zip codes for which data are reported, at least 70% of children ages 12-24 months received a complete series of vaccines. Although the data presented are for a single year, they suggest the usefulness of targeting public health efforts in zip codes with low vaccination series completion rates.

**Exhibit 81. Series 3:2:2:2 Vaccine for Children Ages 12-24 Months by Zip Code, 2012**

Localities	Zip Code	Children Receiving any Vaccination	Percentage that Completed Series	Percentage Vaccinated			
				DTAP	IPV	HIB	HBV
Apache Junction	85119/219	162	73%	74%	85%	86%	90%
	85120/220	250	76%	77%	86%	86%	92%
Arizona City	85123/223	125	82%	83%	91%	90%	92%
Casa Grande	85122/222	735	79%	80%	88%	88%	92%
	85130/230	33	94%	94%	97%	97%	97%
	85193/293	24	79%	79%	96%	96%	96%
	85194/294	43	81%	86%	86%	86%	81%
Coolidge	85128/228	243	80%	81%	90%	91%	95%
Eloy	85131/231	190	84%	84%	92%	92%	94%
Florence	85132/232	180	72%	72%	84%	86%	90%
Gold Canyon	85118/218	52	71%	77%	81%	85%	87%
Kearny	85137/237	*	68%	68%	82%	82%	100%
Mammoth	85618	*	87%	87%	87%	100%	93%

Localities	Zip Code	Children Receiving any Vaccination	Percentage that Completed Series	Percentage Vaccinated			
				DTAP	IPV	HIB	HBV
Maricopa, City of	85138/238	516	67%	68%	78%	81%	86%
	85139/239	257	61%	63%	82%	83%	87%
Oracle	85623	33	70%	79%	88%	94%	91%
Queen Creek	85142/242	657	69%	71%	82%	82%	85%
Red Rock	85145/245	45	82%	91%	89%	96%	82%
San Manuel	85631	39	85%	87%	97%	97%	95%
San Tan Valley	85140/240	606	73%	75%	85%	86%	87%
	85143/243	524	65%	67%	79%	81%	84%
Stanfield	85172/272	42	86%	86%	90%	90%	90%
Superior	85173/273	34	74%	74%	79%	79%	91%
Valley Farms	85191/291	*	86%	86%	100%	100%	100%
Winkelman	85192/292	*	81%	81%	100%	100%	100%

Note. From Arizona Department of Economic Security (DES) Excel database (provided by First Things First). All percentages are rounded off.

\*Data suppressed according to FTF guidelines stating all counts less than 25 and not 0 of data related to health should not be reported. Part of Winkelman (30.41%) is in Gila County.

Exhibit 82 shows a large geographic variation in completion of the 4:3:1:3:3:1 vaccination series, ranging from 40% to 75%. The completion rate exceeded 60% in eight of the 23 zip codes for which data are reported.

**Exhibit 82. Series 4:3:1:3:3:1 Vaccine for Children Ages 19-35 Months by Zip Code, 2012**

Localities	Zip Code	Children Receiving any Vaccination	Percentage that Completed Series†	% Vaccinated					
				DTAP	IPV	MMR	HIB	HBV	VZV
Apache Junction	85119/219	232	48%	51%	69%	74%	73%	66%	73%
	85120/220	353	54%	61%	75%	79%	80%	75%	76%
Arizona City	85123/223	147	59%	63%	82%	81%	80%	83%	80%
Casa Grande	85122/222	940	58%	63%	79%	80%	81%	80%	80%
	85130/230	25	64%	64%	76%	84%	84%	80%	84%
	85193/293	31	61%	61%	84%	77%	81%	87%	77%
	85194/294	48	65%	71%	85%	83%	90%	83%	81%
Coolidge	85128/228	284	60%	64%	81%	81%	80%	83%	79%
Eloy	85131/231	212	69%	71%	85%	83%	83%	87%	83%
Florence	85132/232	210	46%	55%	70%	68%	73%	70%	66%

Localities	Zip Code	Children Receiving any Vaccination	Percentage that Completed Series†	% Vaccinated					
				DTAP	IPV	MMR	HIB	HBV	VZV
Gold Canyon	85118/218	78	55%	63%	71%	79%	76%	67%	77%
Kearny	85137/237	32	50%	59%	78%	81%	78%	78%	72%
Mammoth	85618	36	75%	75%	86%	89%	92%	86%	86%
Maricopa, City of	85138/238	698	42%	50%	69%	71%	75%	68%	68%
	85139/239	361	43%	51%	71%	71%	73%	71%	70%
Mesa	85212	*	25%	25%	50%	50%	75%	75%	50%
Oracle	85623	38	50%	63%	76%	89%	82%	79%	84%
Queen Creek	85142/242	843	44%	53%	57%	74%	71%	68%	73%
Red Rock	85145/245	57	58%	65%	75%	89%	88%	81%	89%
San Manuel	85631	34	65%	68%	85%	85%	88%	82%	82%
San Tan Valley	85140/240	703	44%	52%	70%	74%	74%	69%	73%
	85143/243	628	41%	51%	63%	72%	66%	66%	70%
Stanfield	85172/272	47	68%	77%	89%	87%	91%	85%	85%
Superior	85173/273	37	41%	46%	70%	70%	70%	73%	62%
Valley Farms	85191/291	*	40%	40%	80%	80%	80%	100%	80%
Winkelman	85192/292	*	56%	56%	61%	83%	72%	72%	72%

Note. From Arizona Department of Economic Security (DES) Excel database (provided by First Things First). All percentages are rounded off.

\*Data suppressed according to FTF guidelines stating all counts less than 25 and not 0 of data related to health should not be reported. Part of Winkelman (30.41%) is in Gila County. †Including the four-dose PCV vaccination negatively skews the % series completion.

## Developmental Screening

Developmental screening is another family health practice essential for ensuring children grow and develop optimally. The Arizona Chapter of the American Academy of Pediatrics recommends that all children receive a developmental screening at 9, 18, and 30 (or 24) months with a valid and reliable screening instrument. Research has documented that early identification through developmental screening can lead to enhanced developmental outcomes and reduced developmental problems for children who have special needs. Providing children at risk for developmental delays with the supports and services they need early in life leads to better health and educational outcomes into adulthood.

There are several elements of developmental screening that are reported by the Arizona Department of Health Services. These include Individualized Family Service Plans (IFSP), evaluation/assessment, and in-home or out-of-home services or programs. The Arizona Early Intervention Program (AzEIP) was established under Part C of the Individuals with Disabilities Education Act (IDEA) to serve as Arizona's statewide, interagency system of supports and services for families with infants and toddlers with developmental delays. As of April 2013,

parents and caregivers in Pinal County were able to access a Central Referral Line for AzEIP referrals that serves five Arizona counties (AzEIP, 2013).

The Pinal Regional Partnership Council has strongly supported developmental and sensory screening programs, as a means of identifying potential learning problems in young children and ensuring children identified as delayed are able to successfully progress in their education. Council prioritization of this issue is in part evidenced by two of the First Things First School Readiness Indicators it has chosen:

- Number/percentage of children with special needs/rights enrolled in an inclusive early care and education program with a Quality First rating of 3-5 stars; and
- Number/percentage of children with newly identified developmental delays during the kindergarten year.

In SFY 2014, the region allocated \$330,000 for programs that screened 2,200 children for hearing, vision, and developmental challenges. The region's proposed SFY 2015 budget increases this allocation by \$33,000. This money will be used to replace damaged equipment with new sensory screening equipment and purchase ASQ developmental on-line screening equipment to expand capacity of home visitation services.

County and zip code level data are not currently available from AzEIP because DES is in the process of upgrading its data system. However, statewide data offers a global view of the scope and effectiveness of the program. Exhibit 83 shows the statewide outcomes for three key performance indicators. The outcomes show that AzEIP implementation in the Pinal Region must operate at a high level of effectiveness to match outcomes of the state as a whole.

**Exhibit 83: AzEIP Performance Outcomes, Arizona, 2007-2012**

<b>Percentage of infants and toddlers with IFSPs:</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>
<b>Who receive the early intervention services on their IFSP in a timely manner.</b>	71%	97%	84%	78%	78%	87%
<b>Who primarily receive early intervention services in the home or community-based settings.</b>	63%	76%	74%	86%	93%	94%
<b>For whom an evaluation and assessment and an initial IFSP meeting were conducted within Part C's 45-day timeline.</b>	63%	72%	85%	98%	97%	95%

Families in the Pinal Region access services for children with developmental disabilities from the Arizona DES's Division of Developmental Disabilities. Exhibit 84 shows that the number of children in Pinal County, from birth to 2.9 years of age, referred for screening increased from 2007 to 2010, and slightly decreased in 2011 and 2012. However, the percentage of referred children that completed screening decreased over this time period, from 69% in 2007 to 40% in 2012. Lower rates of screening completion observed in recent years are behind statewide rates for 2009 to 2012. The number of children from birth to 2.9 years of age that received

developmental disability services and the number of visits received reflects the pattern of referrals, with an increase from 2007 to 2010 and decrease in 2011 and 2012.

While the number of children, ages 3-5.9 years, referred to screening increased almost annually from 2007 to 2012, screening completion rates fluctuated. However, the number of children in this age group that received developmental disability services and the number of visits received both increased over this time period. Although there may be a variety of reasons out of the control of agencies why children who have been referred for developmental screening do not receive screening (e.g., families move out of the region), it may be useful for agencies to strategize ways to increase follow-up contact with families to ensure children receive screening.

**Exhibit 84. Child Developmental Disability Services, 2007-2012**

	Year	Referred		Screened		Percentage Referred that were Screened		Number Served		Number of Service Visits	
Age Ranges:		0 - 2.9	3 - 5.9	0 - 2.9	3 - 5.9	0 - 2.9	3 - 5.9	0 - 2.9	3 - 5.9	0 - 2.9	3 - 5.9
<b>Pinal County</b>	2007	39	58	27	37	69%	64%	65	110	4,414	14,387
	2008	58	58	37	26	64%	45%	89	100	7,108	14,747
	2009	92	64	52	37	57%	58%	125	120	10,087	17,925
	2010	97	67	50	37	52%	55%	154	126	11,566	16,988
	2011	88	86	37	49	42%	57%	139	159	9,724	21,838
	2012	87	94	35	44	40%	47%	135	161	9,277	20,005
<b>Arizona</b>	2007	1,822	1,282	1,064	786	58%	61%	2,895	2,508	171,525	301,581
	2008	1,808	1,340	975	643	54%	48%	2,860	2,549	194,229	344,339
	2009	1,741	1,384	898	718	52%	52%	3,073	2,737	207,873	406,667
	2010	1,479	1,271	796	658	54%	52%	2,992	2,696	195,270	384,380
	2011	1,565	1,309	784	689	50%	53%	2,808	2,616	181,971	373,512
	2012	1,429	1,388	734	671	51%	48%	2,657	2,574	169,573	364,846

*Note.* From Arizona Department of Economic Security (DES) Excel database (provided by First Things First). Zip code level data on the number of children receiving developmental disability services are available from the Arizona Department of Economic Security but are not presented in this report because most counts are below 25, requiring they be suppressed to preserve participant confidentiality.

## Injuries

Another measure of child well-being is the number of severe injuries sustained in childhood. While some injuries are expected, an uncharacteristically high number can indicate homes that lack a safe environment for raising a child or dangers within the community. It may also indicate whether parents are following safe parenting practices for handling newborns. The number of Pinal youth under 19 years of age with inpatient discharges for injury and/or poisoning as a first-listed diagnosis increased from 222 in 2007 to 422 in 2010 (Exhibit 85). The number of such injuries in 2010 was approximately the same as in the previous year. In each year and for both age groups, males had a substantially higher number of discharges for injury and/or poisoning.

These data suggest that public health campaigns addressing injury and poisoning prevention should target families with boys under the age of 15 years.

**Exhibit 85. Child Inpatient Discharges for Injury and/or Poisoning, 2007-2011**

	2007		2008		2009		2010		2011	
	<15 yrs	15-19 yrs	<15 yrs	15-19 yrs	<15 yrs	15-19 yrs	<15 yrs	15-19 yrs	<15 yrs	15-19 yrs
<b>Females</b>	39	34	39	*	104	51	114	54	112	45
<b>Males</b>	74	75	55	51	150	106	155	99	147	97
<b>Total</b>	113	109	94	74	254	157	269	153	259	142

Note. From Table 1 Number of Inpatient Discharges with Injury and Poisoning as First-listed Diagnosis by Age Group, Gender, Race/Ethnicity, and County of Residence, 2007-2011, Arizona Department of Health Services, Health Status and Vital Statistics. Nonzero data counts below 25 are suppressed according to FTF guidelines.

## Child Mortality and Morbidity

Over the last 50 years, the United States has seen a significant decline in infant and child mortality, likely attributed to fewer infectious diseases, improved living conditions, and advances in medical technology. However, many deaths still occur that could be prevented. Moreover, the child mortality rate in the United States is almost twice that of the rate in the United Kingdom (Land, 2009). In 2012, 6 countries in the world had a lower mortality rate for children under five years of age (The World Bank, n.d.).

Infant mortality is defined as the death of an infant at any time from birth up to five years of age, but not including, the first year of life. Two distinct periods make up the infant mortality timeframe: neonatal (from birth through 27 days) and post-neonatal (28 days to 11 months after birth). A majority of infant deaths occur in the neonatal period. From 2005 to 2012, the number of infant deaths ranged from a low of 20 to a high of 39. More detailed quantitative data for causes of infant mortality cannot be presented in this report due to low data counts requiring data suppression. However, two causes of child mortality in Pinal County from 2005-2012 stand out for their size and consistency over time from 2005 to 2011: conditions originating in the perinatal period (from 140 completed days of gestation to 28 days after birth) and congenital malformations. The perinatal period commences at 20 completed weeks (140 days) of gestation and ends 28 days after birth. It is possible that some of these conditions may be addressed by the expansion of programs targeting perinatal mothers and their newborns.

Arizona Department of Health Services data show that the most consistent causes of death from 2005 to 2011 among children ages 1-14 who resided in Pinal County were motor vehicle accidents and accidental drowning (2013). This suggests the usefulness of programs promoting use of child seats in automobiles and pool and tub safety. More detailed data about all causes of death for children ages 1-14 cannot be presented based on First Things First data suppression guidelines that require suppression of small counts to ensure confidentiality.

Comparative data for child fatalities that take into account a county's population show that Pinal County has 46.8 child fatalities per 100,000 residents (Exhibit 86). This places the county eleventh in the child fatality rate among state's 15 counties. Across the state of Arizona, Pinal County had the lowest stable rate of child fatalities, with 46.8 deaths per 100,000 residents.

**Exhibit 86. Child Fatality Rates per 100,000 Children by County, 2012**

County	Fatality Rate per 100,000 Residents (n=854)
La Paz (n=8)	217.1
Gila (n=14)	123.7
Navajo (n=7)	88.7
Coconino (n=20)	63.9
Santa Cruz (n=9)	62.5
Yavapai (n=24)	60.6
Graham (n=6)	56.5
Cochise (n=17)	55.9
Mohave (n=21)	52.1
Maricopa (n=500)	49.6
Pinal (n=48)	<b>46.8</b>
Yuma (n=26)	46.1
Greenlee (n=26)	41.5
Apache (n=1)	41.2
Pima (n=91)	40.7

Note. From *Arizona Child Fatality Review Program Twentieth Annual Report*, November, 2013, Arizona Department of Health Services.

## Behavioral Health

Women's access to behavioral health services for themselves and their children has important implications for the well-being of young children. Research has identified a relationship between depression and other behavioral health conditions during pregnancy and negative birth outcomes, such as preterm birth and low birth weight (Glover, 2014; Kim et al., 2013; Osborne & Monk, 2013). Some research suggest that it would useful to screen mothers for depression following delivery and before they leave a hospital (Burton et al., 2013) and that such screening might be widely acceptable (Kingston et al., 2014).

Regarding infant and preschool mental health, research has found that certain psychological disorders diagnosed at a very early age may continue into adulthood (Luby, 2012). Therefore, attempts to treat disorders at an early age is of consideration. A recent study found that an increased percentage of preschool children are treated with psychotropic medication, yet they are not receiving specialized psychological and social services that treatment guidelines recommend (Fontanella, Hiance, Phillips, Bridge, & Campo, 2013). Early childhood education



programs benefit from institutionalizing a focus on children's mental health, with special attention to specialized training of staff (Green, Malsch, Kothari, Busse, & Brennan, 2012).

The Pinal Regional Partnership Council supports behavioral health programs that benefit young children and their families. In SFY 2014, the region allocated \$246,000 to provide mental health consultations to teachers and caregivers at 10 centers and four homes, and tuition reimbursement for early childhood workers to increase their capacity. Consultations will be provided to 16 centers in 2014. The Regional Partnership Council also allocated \$9,312 in SFY 2014 for a Quality First Mental Health Consultation Warmline. The SFY 2015 proposed budget includes \$10,152 for this warmline.

Limited data about usage of behavioral health services are available in Pinal Region. Arizona is divided into six Geographical Service Areas (GSAs) served by Regional Behavioral Health Authorities (RBHA) or Tribal Behavioral Health Authorities (TBHA). Pinal County falls within GSA-4, which includes Gila County and is served by Cienpatco Behavioral Health Services (CBHS). Data about usage of behavioral health services by pregnant women, women with dependent children, and children ages 0-5 are currently available for GSAs but not at the county or zip code levels. Exhibit 87 shows that the percentage of pregnant women utilizing behavioral health services increased from 2010 to 2013 in GSA-4. Similarly, the percentage of women with dependent children that utilized services increased from 2010 to 2013. However, the percentage of children ages 0-5 using behavioral health services decreased over the period. GSA-level data is instructive, but county-level data is needed for the region to better understand usage of behavioral health service by these populations.

**Exhibit 87. Usage of Behavioral Health Services in Geographical Service Area (GSA) 4, by Pregnant Women, Women with Dependent Children, and Children 0-5, 2010 and 2013**

	Pregnant Women		Women with Dependent Children		Children 0-5	
	2010	2013	2010	2013	2010	2013
<b>GSA - 4</b>	37 (0.6%)	69 (0.8%)	178 (2.7%)	303 (3.9%)	642 (16.9%)	789 (14.9%)
<b>GSA Total</b>	2,715 (2.3%)	2,757 (2.4%)	20,040 (17.0%)	11,468 (14.8%)	9,162 (14.4%)	11,468 (14.8%)
<b>Statewide</b>	120,567 (2.3%)	2,867 (2.4%)	20,770 (17.2%)	21,163 (18.0%)	9,253 (13.8%)	11,496 (14.7%)

Note. From Arizona Department of Health Services. Division of Behavioral Health Services. 2010 & 2013. [First Things First CY2010, 2013 data file]. Unpublished raw data received from First Things First State Agency Data Request.

## Oral Health

More than two-thirds (69%) of Graham/Greenlee parents responding to the 2012 First Things First Family Community Survey agreed that children age five and under should have regular visits with the same dental provider. In SFY 2014, the Pinal Region allotted \$330,000 for oral health screening activities, including: oral health screenings and fluoride varnish application for children ages 0-5; oral health care training for families with young children; and outreach to

dentists, encouraging families to have children receive a dental examination by the age of one. Exhibit 88 provides information about oral health activities in the region in SFY 2014 and proposed activities for SFY 2015. As a sign of the importance of young children having good oral health, the Pinal Regional Partnership Council has adopted the following First Things First School Readiness Indicator: the number/percentage of children age 5 with untreated tooth decay.

**Exhibit 88. Oral Health Promotion Activities, 2014 and 2015 (Proposed)**

Type of activity	2014		2015
	Target	Contracted	Target
Number of children receiving oral health screenings	2,200	2,200	2,200
Number of children having fluoride varnish applied	1,750	2,200	2,200
Number of participating professionals	12	12	12
Number of prenatal women receiving oral health screenings	1,100	150	150



#### Other Relevant Data

In 2012, a total of 161 children under 15 years of age received an inpatient discharge with asthma as the first-listed diagnosis in a Pinal hospital. Less than 10 youth ages 15 to 19 received such a discharge (Exhibit 89). Hospital admittance for asthma may sometimes result from inadequate preventative illness management or poor environmental conditions in the home. The data suggests that public health efforts might usefully target families with children under 15 years of age who suffer from asthma. The large difference between the numbers of male and female children discharged with asthma as the first-listed diagnosis is also worthy of further investigation.

**Exhibit 89. Number of Inpatient Discharges with Asthma as First-listed Diagnosis, 2012**

		Children 0-15 years old	Adolescents 15-19 years old
Pinal County	Female	66	8
	Male	95	*

Note. From Table 1 Number of Inpatient Discharges with Asthma as First-Listed Diagnosis by Age Group, Gender, Race/Ethnicity and County of Residence, Arizona. Retrieved September 13, 2013 from <http://www.azdhs.gov/plan/hip/for/asthma/index.htm>. \*Cell suppressed due to count less than 6.

## **Public Awareness and Collaboration (Public Information and System Coordination)**

Any successful initiative aimed at effectively impacting early childhood development must be designed and implemented in an environment that includes both public awareness and collaboration. A high level of public awareness helps to ensure that families in need of assistance are able to locate and utilize available services and that they recognize the importance early childhood development. Collaboration is important in any context where multiple services are provided to a target population from different sources. The BUILD Initiative is a national organization that has recognized both the power and necessity for collaboration in early childhood systems development (Coffman, 2007). The following section examines the extent to which the First Things First Pinal Regional Partnership Council has enhanced public awareness of early childhood issues and fostered systems coordination as well as strategies for improvement.

### **Public Awareness of Early Childhood Issues**

That the Pinal Regional Partnership Council public awareness of and support for early childhood issues to be important is evidenced by the Council's SFY 2014 funding allocations in this area. The Council allocated \$168,507 for a media campaign to draw residents of the region to the ReadyAZKids.com, a website that posts content about early childhood development and health. The Council also allocated \$84,000 for grassroots community outreach designed to increase parents' and community awareness of and engagement with early childhood issues. Other SFY 2014 funding (\$29,000) similarly promotes awareness of the importance of early childhood development and health through community-based activities and the distribution of educational material. The proposed SFY 2015 budget funds community outreach and media efforts at the same levels.



Increasing parents' awareness of early childhood development and health is also implicitly accomplished through the provision of community-based parent education classes. In SFY 2014, the region allocated \$330,000 to offer classes on parenting, child development, and problem solving skills and the proposed SFY 2015 budget continues funding for such activities

at the same level. The region's efforts to increase public awareness of early childhood are consistent with two of the First Things First School Readiness Indicators it has adopted:

- The number/percentage of children demonstrating school readiness at kindergarten entry in the development domains of social -emotional, language and literacy, cognitive, and motor and physical.
- The percentage of families who report they are competent and confident about their ability to support their child's safety, health and well-being.

Outreach efforts to raise public awareness and support for early childhood programs are primarily conducted by a Parent Awareness and Community Outreach Coordinator. A new individual took over this position in September 2013. Exhibit 84 shows the activities of the new Coordinator from September 2013 through February 2014. Over this period, the Coordinator participated in 48 activities that reached 2,848 individuals. Of the 2,848 individuals reached, 723 were attendees at the 14<sup>th</sup> Annual Pinal County Educators Conference; 500 attended the Silent Witness Casa Grande event; 300 attended the 2013 Pinal County Domestic Violence Coalition Conference; 187 attended Polarfest; 150 attended the Ak-Chin Fall Festival; and 100 attended CASA's National Adoption Day Celebration and Give Kids a Smile Day. Outreach activities included hosting information tables, networking with colleagues in the field, conducting one-on-one meetings, and facilitating group presentations. Exhibit 90 lists the organizations and agencies that completed these activities.

**Exhibit 90. Organizations Collaborating in Outreach Activities, Sept 2013 – Feb 2014**


Apache Junction Public Library	Community Alliance Against Family Abuse	Polarfest
Arizona Partnership for Children	Coolidge Unified School District	Seeds of Hope
Arizona Town Hall	Easter Seals Blake Foundation	Sun Life Family Health
Arizona's Children Association	Empowerment Systems	Tri-Valley Newspapers,
Casa Grande Police Department	First Things First	University of Arizona Cooperative Extension
Casa Grande Regional Medical Center	Pima County Attorney's Office	Ultra Star Movies
Child and Family Resources	Pinal County Courts and CASA	United Way of Pinal County
Community Action Human Resources Agency		

Note: Data were taken from unpublished monthly community outreach activity reports completed by the Community Outreach Coordinator that are submitted to the Regional Director. No presentations were reported for July.

## System Coordination

Over the last few years, the Pinal Region has invested a substantial amount of effort in the areas of collaboration and coordination. The region has three active coalitions: Early Care and Education, Family Support, and Health Care. Coalition membership (Exhibit 91) is facilitated by a Program Coordination Specialist.

### Exhibit 91. Pinal Coalitions

Coalition	Members
<b>Pinal Early Care and Education Coalition</b>	<p> Ak-Chin Community Child Development Center  Association for Supportive Child Care  Casa Grande Elementary School District Early Childhood Learning Center  Central Arizona College  Easter Seals Blake Foundation  ExoectMoreAriznoa.org  First Things First  J.O. Combs Unified School District  Pinal County ESA  Pinal Gila Community Child Services  Smart Support  Teen Challenge's Home of Hope  United Way of Pinal County  University of Arizona Cooperative Extension </p> 
<b>Pinal Health Care Coalition</b>	<p> Cenpatico  Child &amp; Family Resources  Easter Seals Blake Foundation  First Things First  Horizon Human Services  Pinal County  Pinal Gila Community Child Care Services  Sun Life Family Health Center  University of Arizona Cooperative Extension  Women Infants &amp; Children (WIC) </p>
<b>Pinal Family Support Coalition</b>	<p> Apache Junction Library - Fun Van  Arizona Children's Association/Parents as Teachers  Arizona Department of Economic Security  Arizona Youth Partnership  CASA's  Child &amp; Family Resources  Community Action Human Resource Agency  Community Alliance Against Family Abuse  Easter Seals Blake Foundation  Empowerment Systems, Inc.  First Things First  Florence Community Library  Pinal County Attorney's Office  Pinal Gila Child Care Services  Pinal Gila Community Child Services  University of Arizona Cooperative Extension </p>

In 2014, each of the three coalitions developed an updated strategic plan and vision statement. The three coalitions also developed shared collaboration strategies. Exhibit 92 shows the shared strategies and objectives of all three coalitions as well as the independent strategies and objectives of each.

**Exhibit 92. Pinal Coalitions' Strategies and Objectives**

	<b>Strategy</b>	<b>Objective</b>
<b>Shared Collaboration Strategies</b>	1. Maintain a Current Regional Resource Guide	Inform families and service providers about available regional resources
	2. Pinal Regional Coordination Calendar	Improve the system of early health and development coordination within Pinal County
	3. Use a logo to identify local resources in the Pinal Region	Provide a platform for service providers to come together for coordination in turn, helping to streamline services and improving the system of early health and development coordination
	4. Collaborative Planning of Community Events	Provide a platform for service providers to come together for coordination in turn, helping to streamline services and improving the system of early health and development coordination
<b>Health Care Strategies</b>	1. Develop an E-system for health care information, events and updates	Provide a platform for health care service providers to come together for coordination and promote partnerships between agencies providing health care.
	2. Create a shared community resource referral form	Help to streamline services and identify gaps and overlaps in service and to improve the system of the early health and development coordination
<b>Family Support Strategies</b>	1. Develop a system of face to face meetings for line staff	Provide a platform for family support service providers to come together for coordination and promote partnerships between agencies providing family support
	2. Create combined family support marketing materials	Provide a platform for family support service providers to come together for coordination and improve the system of family support within the Pinal Region
	3. Create a shared community resource referral form	Help to streamline services and identify gaps and overlaps in service and to improve the system of the early health and development coordination
<b>Early Care and Education Strategies</b>	1. Identify Program Gaps in Parent Education	Help to streamline services and identify gaps and overlaps in service to in turn improve the system of parent education within the Pinal Region
	2. Develop a system of networking meetings for child care providers	Provide a platform for early care and education service providers to come together for coordination
	3. Develop a series of commercials	Help to streamline services, improve information sharing and improve FTF and early childhood awareness in Pinal County



# Summary and Conclusions

This report is the fourth biennial assessment of the health, welfare, and educational needs and assets of the children, families, educators, caregivers, and family support providers served by the Pinal Regional Partnership Council. A vast amount of data have been presented in this report to: a) provide an expansive look at the current state of the region's children and their myriad supports, b) examine trends in key indicators and needs of specific sub-populations, and c) recommend strategies to improve child health and developmental outcomes in the Pinal Region.

## Demographics

Pinal County, which constitutes the Pinal Region, has a 2012 population of 387,365 people, with the majority of them residing in Apache Junction, Casa Grande, and the City of Maricopa. Pinal County is projected to increase in population by 39% to 561,844 people over the next 10 years. The region is ethnically and racially diverse, with approximately 32% of births to Hispanic/Latina mothers. Of other Pinal County births in 2012, 8% were to mothers who were American Indian or Alaskan Native. Just over half (53%) of mothers self-identify as white/non-Hispanic. Families in this region are also diverse in composition, with 10% of births from teen parents and with 51% of grandparents that have assumed primary caregiving responsibility for their grandchildren.

## Economic Circumstances

In regard to economic circumstances, 11% of families in Pinal County lived below the poverty line in 2012. This percentage increases to 14% for families with children under the age of five and 43% for single-parent, female-headed households with children under the age of five. This data suggests that female-headed households with children, particularly young children, constitute a high-need population in the region. Pinal County School Districts also show wide variability in the prevalence of poverty in the region. It is estimated that 24% of the children under 18 years of age live in poverty. The median gross annual income in Pinal County was \$55,969, which is a 42% increase from 2000 to 2012. This number is just 2% below the \$56,792 median income reported for the state.

Unemployment data is an important indicator to understand the region's economic condition. In 2008, most Pinal County communities had an average unemployment rate of 7.2%. However, the county's overall unemployment rate rose to a high of 10.3% in 2011 before moderating to 8.4% in 2012.

Net job flow data emphasizes the challenges many families in the region face. In 2012, net job flows increased every quarter except the second quarter in which they decreased. Net jobs flows continued to increase in the first quarter of 2013. Many families with children ages 0-5 rely on benefits to help them survive unemployment or low income levels. The number of families enrolled in TANF dropped by 2% in 2012 as compared to a 4% decrease statewide. The number of families receiving SNAP benefits increased by 35% from January 2009 to January

2012. In most of the region's communities, 45% or more of school children are enrolled in a free or reduced school lunch program. In addition, the number of children certified to participate in the WIC program slightly decreased from January 2010 to January 2012. The number of children who then participated in the program followed the same decreasing trend.

## **Educational Indicators**

Research suggests that a mother's education level has important implications for the educational progress of her children. From 2008 to 2012, the educational level of mothers in Pinal County has mostly remained constant. The percentage of mothers with 1-4 years of college decreased from 48% in 2008 to 47% in 2012 and the percentage of mothers with at least one year of college increased from 32% to 35% in the same years respectively. This stagnation is cause for concern also noting that 18% of mothers in 2012, 2% less than 2008, did not have a high school diploma.

Other important educational indicators include assessments of kindergarten readiness, special education needs, standardized test scores, and graduation rates. Third grade AIMS scores reveal a great deal of variation in performance by school district. As a whole, 63% of Pinal County students met or exceeded academic targets in math in 2013 and 71% met or exceeded targets in reading. The 2013 math scores are down from 68% in 2012. Reading scores, however, show improvement from 73% in 2012.

Two of the largest groups of students with special education needs are English Language Learners (ELL) and those with Individualized Education Program (IEP). Data shows that ELL and IEP kindergarten student are relatively dispersed throughout the region, though a higher concentration was noted in Casa Grande Elementary District.

High school graduation rates show longer term outcomes for students enrolled in these districts. The Pinal Region's high school graduation rates vary widely both longitudinally within school and between schools. From 2008 to 2012, three of nine school districts experienced a movement of 10% in the graduation rate in a single year. The majority of schools had graduation rates of 65% or better for most or all of the five years reported on.

## **Early Care and Education**

A majority of children in the United States ages birth to six years participate in regular, out of home child care, which justifies the emphasis on quality care for health early childhood development. Quality of child care has been shown to affect many youth outcomes. There are 43 Quality First child care centers in the Pinal Region. The majority of these are located in Casa Grande. In 2013, there were a total of 57 licensed child care facilities in the Pinal Region. The region's licensed facilities had a combined capacity of 4,218 children, a 21% increase from 2011. The largest percentage (23%) of this capacity was in Casa Grande, followed by Queen Creek (17%), Apache Junction (17%), and the City of Maricopa (15%). The data suggests that some areas in the region lack ADHS-licensed facilities and efforts to promote increased licensure and warranted.



Examination of child care assistance data by county zip codes reveals a fluctuation in the number of families and children eligible for and receiving child care assistance. The numbers increased steadily in Arizona City, Coolidge, and a portion of Maricopa. The numbers decreased steadily in Gold Canyon and a portion of Casa Grande.

## **Family Support**

Family Support is a broad system of programs, services, and collaborations designed with the goal of helping families function to their potential. The Pinal Regional Partnership Council has supported families through a variety of programming. In SFY 2014, the region allocated \$2,701,242 for Quality First Scholarships for families; 416 families will be served. In the same year, 330 parents participated in community-based parent education trainings. Home visitation another form of family support the Pinal Regional Partnership Council provides. A total of 465 families received services in SFY 2014.

Three active coalitions - Early Care and Education, Health Care, and Family Support - work to implement the Regional Partnership Council's strategies around collaboration and coordination.

## **Child Abuse/Neglect, Foster Care and Juvenile Justice**

The number of child abuse report in the Pinal Region fluctuated from April 2010 to September 2013 ranging from 1,120 to 1,606 for each six month period. The number of new removals from the home ranged from 100 to 159 for each six month period.

Foster care families and youth in the juvenile justice system may require specific services or support. According to the Arizona Department of Economic Security's most recent reporting, 8.3% of children that had prior replacements in the previous 12 months entered out-of-home care and only 3.1% of children entered out-of home care with prior placements in the previous 12-24 months.

According to the Administrative Office of the Courts, the rates of referred youth, dismissed cases and youth that received probation have steadily decreased from 2010 to 2012. The number of a region's children who are in the juvenile justice system may to some degree be taken as a measure of the efficacy of the early child development and programs in a region.

## **Health Coverage and Utilization**

With high costs associated with health care, most families are dependent on health insurance to cover needed services. Many families in the county have depended on KidsCare/KidsCare II for health coverage for their children. The number of children enrolled in KidsCare/KidsCare II grew by 203% from 432 in February 2012 to 1,308 in February 2013. However, the program ended on January 31, 2014. Some children formerly served by KidsCare/KidsCare II may enroll in health insurance through the Affordable Care Act (ACA) but children whose parents receive health insurance through their workplace cannot get coverage through the ACA. Some parent may not be able to afford to add their children to their workplace health insurance.

## Healthy Births

A woman's access and use of prenatal and perinatal care has important short and long-term implications for the health of her child. It is recommended that a woman access monthly medical care throughout her pregnancy. Arizona Department of Health Services data from 2008 to 2012 show that the region was consistently above the state average in the percentage of women who received more than nine visits during pregnancy. However, slightly fewer women in these counties reported 13+ visits, as compared to the statewide average.

Looking at prenatal practices of pregnant women and characteristics of births, 2012 data from the Pinal Region compares somewhat unfavorably with the state. Three percent more women in the region used tobacco during pregnancy than the state. Births with an abnormal condition reported were 6% higher than in Arizona. However, the rate for infants admitted to newborn intensive care units was one percent lower than the statewide rate.

Low birth weight babies are at risk for serious health problems that may affect their lifelong health. In 2012, the percentage of babies born in the region (7.2%) classified as of a low birth-weight did not differ significantly from the state average of 6.9%.

## Other Health Indicators

Immunizations are preventative measures that have made a significant contribution to public health in the past century. For both the 4:3:1:3:3:1 immunization series for children ages 19-35 and the 3:2:2:2 immunization series for children ages 12-24 months, Pinal County is above state immunization rates.

In Pinal County, the number of children 0-2.9 years of age that were referred for developmental disability screening steadily increased from 2007 to 2010, with somewhat lower numbers for 2011 and 2012. The number of children ages 3-5.9 that were referred for screening has steadily increased from 2008 to 2012. The percentage of the region's children ages 0-2.9 years old that were referred for screening and went on to be screened has shown a steady decrease from a high of 69% in 2007 to 40% in 2012. The Pinal County rates of screening children ages 0-2.9 lagged behind the state rate for 2009-2012. For children ages 3-5.9, the screening rate fluctuated, but in 2012 was less than half of those referred (47%) were screened.

The number of children ages 0-2.9 year old that received developmental disability services rose steadily from 2007 to 2010, but has trended downward since then. In contrast, the number of children 3-5.9 years of age that received developmental disability services steadily increased over the same period. The number of service visits follows the same trends for both age groups of children.

Over the last 50 years, the United States has seen significant declines in infant and child mortality. However, many deaths still occur that are the result of preventable injuries. In Pinal County, there was a fatality rate of 46.8 per 100,000 in 2012.

## **Current Support Strategies**

The Pinal Family Support Council's SFY 2014 funding plan includes a number of strategies to improve the circumstances of young children and their families. To improve access to quality early child care and education programs, the region is funding a media campaign to draw residents to ReadyAZKids.com. The plan also calls for increased grassroots community outreach to raise awareness of and engagement with early childhood issues. Additionally, funds will be used to promote awareness through community-based activities and distribution of education material.

Strategies to increase community awareness of the Pinal Family Support Council's work and goals have been implemented. The Council funds a Community Outreach Coordinator to inform and engage the community in early childhood issues. From September 2013 to February 2014, the Coordinator conducted 301 activities reaching 2,848 individuals.

## **Next Steps**

The Pinal Regional Partnership Council has implemented a variety of strategies to address the needs of young children and their families. These strategies aim to improve: 1) the health, safety, and school readiness of children; 2) the parenting knowledge and skills of caregivers; and 3) the quality of the early child care and education services provided. Many of the Council's strategies are evidence-based and all appear to be appropriate for meeting the needs of the region's young children and their families. The region's SFY 2014 and SFY 2015 funding plans demonstrate that the Pinal Regional Partnership Council is carefully evaluating the effectiveness of the programming it funds and revising funding priorities and levels based on such evaluation. Perhaps the region's greatest strengths are the coordination and collaboration practiced by its 3 active coalitions: Early Care and Education, Health Care, and Family Support. The recent data included in this Needs and Assets Report may help guide the decision-making of these coalitions and the Regional Partnership Council as a whole as they implement strategies to help children 0-5 years of age receive the quality education, health care and family support they need to arrive at school healthy and ready to succeed.

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# Appendix B. AIMS 3<sup>rd</sup> Grade Achievement Levels

Exhibit 1B. AIMS 3<sup>rd</sup> Grade Achievement Levels in Mathematics, 2011-2013

	YEAR	FFB	A	M	E	M or E
Apache Junction District	2011	9%	27%	39%	25%	64%
	2012	11%	19%	46%	25%	71%
	2013	10%	24%	46%	20%	66%
Casa Grande District	2011	13%	26%	42%	19%	61%
	2012	7%	23%	44%	26%	70%
	2013	12%	28%	40%	20%	60%
Coolidge Unified District	2011	24%	37%	33%	6%	39%
	2012	18%	33%	37%	13%	50%
	2013	21%	32%	35%	12%	47%
Eloy Elementary District	2011	16%	41%	37%	5%	42%
	2012	17%	32%	43%	8%	51%
	2013	23%	41%	34%	2%	36%
Florence Unified District	2011	19%	25%	42%	14%	56%
	2012	8%	24%	41%	27%	68%
	2013	12%	26%	45%	17%	62%
J.O. Combs Unified District	2011	11%	22%	47%	20%	67%
	2012	7%	23%	46%	24%	70%
	2013	7%	22%	49%	22%	71%
Mammoth-San Manuel Unified District*	2011	13%	9%	60%	20%	80%
	2012	3%	16%	45%	35%	80%
	2013	14%	20%	44%	22%	66%
Maricopa Unified District	2011	9%	27%	49%	16%	65%
	2012	6%	27%	40%	27%	67%
	2013	10%	24%	42%	24%	66%
Mary C. O'Brian Accommodation District	2011	7%	60%	27%	7%	34%
	2012	0%	33%	33%	33%	66%
	2013	12%	18%	53%	18%	71%
Oracle Elementary District	2011	21%	30%	36%	13%	49%
	2012	11%	43%	39%	7%	46%
	2013	15%	44%	28%	13%	41%
Picacho Elementary District	2011	43%	21%	21%	14%	35%
	2012	35%	29%	24%	12%	36%
	2013	32%	44%	24%	0%	24%
Red Rock Elementary District*	2011	23%	25%	40%	13%	53%
	2012	3%	18%	53%	28%	81%
	2013	9%	26%	50%	15%	65%
Stanfield Elementary District*	2011	5%	19%	38%	38%	76%
	2012	9%	35%	45%	11%	56%
	2013	12%	37%	26%	25%	51%
Superior Unified District	2011	17%	21%	34%	28%	62%
	2012	9%	30%	45%	15%	60%
	2013	6%	31%	44%	19%	63%
Toltec Elementary District	2011	17%	27%	39%	18%	57%
	2012	12%	21%	47%	20%	67%
	2013	19%	31%	35%	15%	50%

	YEAR	FFB	A	M	E	M or E
<b>Pinal County</b>	2011	12%	25%	42%	21%	63%
	2012	8%	24%	43%	25%	68%
	2013	11%	26%	42%	21%	63%
<b>Arizona</b>	2011	10%	22%	43%	24%	67%
	2012	8%	22%	42%	27%	69%
	2013	9%	23%	43%	26%	69%

Note. From AIMS Assessment Results, 2013 AIMS Results, Arizona Department of Education, Research and Evaluation. FFB = Falls Far Below; A = Approached; M = Met; and E = Exceeded. M or E = cumulative passing scores

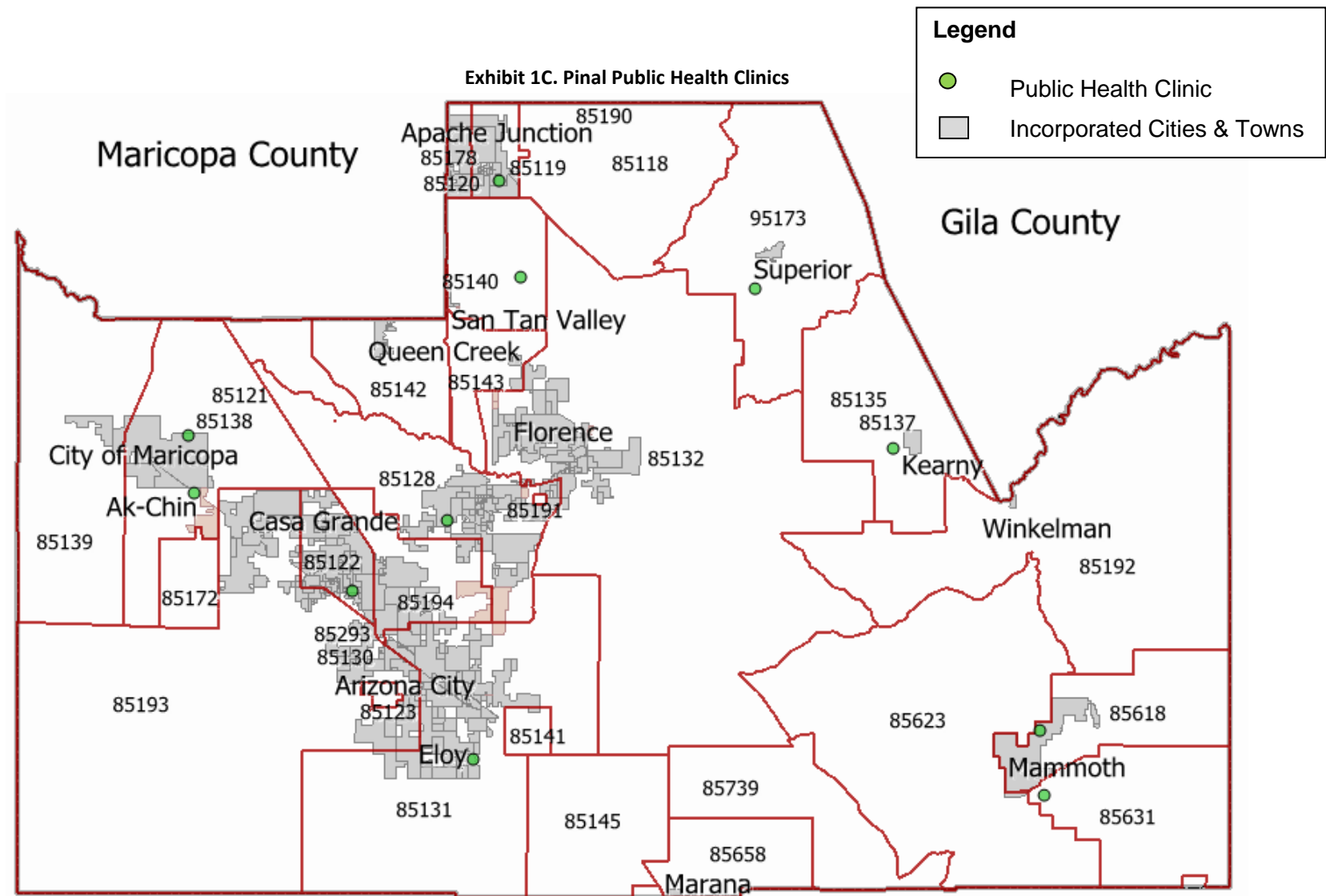
**Exhibit 2B. AIMS 3<sup>rd</sup> Grade Achievement Levels in Reading, 2011-2013**

	YEAR	FFB	A	M	E	M or E
<b>Apache Junction District</b>	2011	7%	19%	60%	13%	73%
	2012	4%	19%	62%	16%	78%
	2013	4%	21%	67%	7%	74%
<b>Casa Grande District</b>	2011	8%	23%	62%	8%	70%
	2012	5%	25%	62%	9%	71%
	2013	5%	28%	59%	8%	67%
<b>Coolidge Unified District</b>	2011	10%	38%	48%	4%	52%
	2012	6%	36%	51%	6%	57%
	2013	11%	37%	50%	2%	52%
<b>Eloy Elementary District</b>	2011	11%	34%	53%	3%	56%
	2012	4%	45%	46%	6%	52%
	2013	12%	31%	56%	0%	56%
<b>Florence Unified District</b>	2011	10%	23%	62%	6%	68%
	2012	3%	23%	63%	11%	74%
	2013	5%	26%	62%	7%	69%
<b>J.O. Combs Unified District</b>	2011	7%	19%	60%	13%	73%
	2012	4%	19%	64%	14%	78%
	2013	4%	20%	66%	10%	76%
<b>Mammoth-San Manuel Unified District*</b>	2011	8%	12%	62%	20%	82%
	2012	2%	16%	65%	18%	83%
	2013	7%	22%	63%	8%	71%
<b>Maricopa Unified District</b>	2011	5%	25%	57%	13%	70%
	2012	4%	19%	64%	14%	78%
	2013	4%	20%	65%	11%	76%
<b>Mary C. O'Brian Accommodation District</b>	2011	0%	7%	93%	0%	93%
	2012	0%	6%	72%	22%	94%
	2013	12%	0%	88%	0%	88%
<b>Oracle Elementary District</b>	2011	9%	36%	50%	5%	55%
	2012	5%	38%	50%	7%	57%
	2013	3%	33%	64%	0%	64%
<b>Picacho Elementary District</b>	2011	14%	50%	29%	7%	36%
	2012	6%	47%	47%	0%	47%
	2013	4%	68%	28%	0%	28%
<b>Red Rock Elementary District*</b>	2011	5%	38%	58%	0%	58%
	2012	0%	18%	75%	8%	83%
	2013	3%	32%	62%	3%	65%
<b>Stanfield Elementary District*</b>	2011	0%	14%	81%	5%	86%
	2012	0%	26%	46%	29%	75%

	YEAR	FFB	A	M	E	M or E
	2013	0%	6%	81%	13%	94%
Superior Unified District	2011	5%	39%	52%	4%	56%
	2012	5%	39%	49%	7%	56%
	2013	3%	34%	57%	6%	63%
Toltec Elementary District	2011	10%	24%	48%	17%	65%
	2012	15%	18%	58%	9%	67%
	2013	0%	28%	66%	6%	72%
PINAL ALL	2011	14%	27%	55%	4%	59%
	2012	7%	31%	59%	3%	62%
	2013	5%	37%	51%	7%	58%
STATEWIDE	2011	7%	22%	61%	11%	72%
	2012	4%	23%	61%	12%	73%
	2013	5%	25%	62%	9%	71%

Note. From AIMS Assessment Results, 2013 AIMS Results, Arizona Department of Education, Research and Evaluation FFB (Falls Far Below) and A (Approaches) both represent a failing score. M (Meets) and E (Exceeds) both indicate a passing score.

## Appendix C. Public Health Clinics in Pinal County



## Appendix D. Hospitals, Clinics, and Population Density of Pinal County, Arizona

